KPMG

Final Report

MID-TERM EVALUATION STUDY OF INDUSTRY CANADA'S SUSTAINABLE DEVELOPMENT STRATEGY (SDS I)

Industry Canada Industrie Canada

Prepared for

Audit and Evaluation Branch
Industry Canada

Submitted by

Hussein Rostum
Cathy Green
Kristina Kanjilal
Meredith Nelson

KPMG Consulting LP

Ottawa
March 31, 2000
34368

Contents

Executive Summary 1

Evaluation Questions 1

Findings of the Mid-term Evaluation 2

Lessons Learned and Recommendations 7

1 Introduction 10

1.1 Context 10

1.2 Objectives and Key Evaluation Questions 10

1.3 Approach 11

1.4 Limitations 12

1.5 Program Profile and Logic Model 13

2 Relevance of SDS I Initiatives to Industry Canada 16

2.1 Continuing Relevance of Initiatives 16

2.2 Consistency of SDS with Departmental Mandate and Goals 18

2.3 Opportunities to Tie Industry Canada's Initiatives to Government-wide SD Priorities 19

3 Mid-Term Results of SDS I 23

3.1 Marketplace Climate 24

3.2 Innovation 28

3.3 Trade and Investment 32

3.4 Stewardship and Management 34

Contents (cont'd)

4 **Meeting the Objectives of SDS I** 37

4.1 Journey Towards Meeting SDS I Objectives 37

4.2 Factors Facilitating SDS I 40

4.3 Lessons Learned from SDS I 42

5 **Monitoring and Reporting Results** 47

5.1 Ongoing Data Collection Requirements 47

5.2 Reporting Requirements 52

5.3 Constraints 54

6 **Performance Measurement** 46

6.1 Establishing Targets and Measuring Performance 46

6.2 Measuring the Results of SDS I 48

6.3 Opportunities for Improvement 49

Appendices

Appendix A: References

Appendix B: List of Persons Interviewed

Appendix C: Interview Guide

Executive Summary

Industry Canada commissioned KPMG Consulting LP to undertake a mid-term evaluation study of the first Sustainable Development Strategy of the department (SDS I). Sustainable development (SD) has been integrated into both the *Department of Industry Act* and the *Auditor General Act*. Industry Canada's next strategy must be tabled in Parliament by the end of 2000.

This evaluation reviews the mid-term results achieved during the first two years of the three-year time frame for SDS I (December 1997 through December 2000). It does not include a full evaluation of program impacts for achieving government-wide sustainable development objectives because implementation of the SD program is still underway within the department.

The approach used for this study involved a series of interviews with departmental staff, clients and industry representatives. It also involved a review of relevant documents such as the department's monitoring and reporting system. It is important to understand that the views expressed by individuals consulted represent, to a large extent, a "self-assessment" of SDS I by the department and its stakeholders. As a result, the interpretation of the results of the consultation process should be seen within a framework of this self-assessment and of comparative checks.

The mid-term evaluation is but one of the activities towards developing the department's next Sustainable Development Strategy (SDS II). This report provides a review of the results achieved to date by the department through the implementation of SDS I, what aspects have changed, and the lessons learned from SDS I. This evaluation also identifies implementation questions that need to be addressed for the next phase of sustainable development initiatives by Industry Canada.

Evaluation Questions

The specific focus of the mid-term evaluation was centered on the following key evaluation questions:

- What is the relevance of the SDS I initiatives for Industry Canada? To what extent is SDS I consistent with the departmental mandate and goals?
- What is the relevance of Industry Canada's SDS I initiatives for the government-wide sustainable development objectives?
- What are the results achieved to date by SDS I? Did the department do what it said it would do?
- What factors facilitated the implementation of SDS I?

- What mechanisms are in place for monitoring and reporting on SDS I activities, and how effective are these mechanisms?

- Does SDS I address how the department will measure, analyze and report performance? What opportunities exist to improve the department's capacity to measure performance?

- What are the lessons learned, based on factors that might have impeded the further progress of SDS I, that can be useful for SDS II?

Findings of the Mid-term Evaluation

➢ **Relevance of SDS I Initiatives**

- All Industry Canada's 28 initiatives appear relevant to the department and to the sustainable development objectives of the government. Based on our interviews, some of the department's strategic objectives are perceived as offering more opportunity to advance sustainable development than do others. The innovation and marketplace strategic objectives are perceived to be the most relevant in the medium term. The connectedness objective appears to have a significant potential in the longer term. The stewardship and management objective is considered to be necessary to support the initiatives of the strategic objectives.

➢ **Meeting the Objectives of SDS I**

As evidenced by the December 1999 report of the Commissioner of the Environment and Sustainable Development, *Moving up the Learning Curve*, it is expected that as departments become more familiar with the sustainable development agenda, their strategies will evolve and improve. Industry Canada has come a long way in moving up the learning curve over the past two years. Concrete steps that the department has undertaken to advance its sustainable development agenda include:

- Development of the first sustainable development strategy in 1997 that included:
  - A departmental profile describing the department's mandate and key activities, its strategic objectives and principal lines of business, and the legislative and policy context in which the department operates.
  - A description of the issues scan process comprised of an initial baseline study and an analysis of emerging sustainable development themes relevant to departmental activities.

- A description of the stakeholder consultations that were held to involve stakeholders throughout the stages of building the strategy. This consultation process with stakeholders was a key requirement of the *Guide to Green Government* and the process helped the department to better understand the needs and views of stakeholders while communicating its commitment to SD.

- 27 action items in SDS I to operationalize and promote progress on the nine priority areas identified for the four strategic objectives. The action plan also described partnerships for helping the department achieve its objectives and goals.

- Addition of one further action item to the Strategy in 1998.

- Significant progress has been made on all of the action items to date. The department has completed all of the discrete action items it set out in SDS I, and good progress is being made on each of the remaining on-going action items.

- Undertaking of other sustainable development related activities beyond the scope of SDS I. For example, the department has invested time and support to the federal climate change priorities, and to programs such as CANARIE, SchoolNet, the Community Access Program, Computers for Schools and the Canadian Tourism Commission's activities.

- Creation of a draft evaluation framework that sets out the planned approach for periodic evaluation activities to assess the overall effectiveness of the SDS implementation.

- Development of a detailed monitoring and reporting system whereby semi-annual progress reports are prepared on each of the defined action items, describing completed progress to date. These progress reports are presented to senior management and are integrated into the department's Departmental Performance Report.

- Creation of a dedicated "sustainable development unit" to advance the sustainable development agenda and to promote awareness.

- Undertaking of an assessment of the first strategy, as evidenced by this mid-term analysis review. This mid-term evaluation describes what has been achieved, what lessons have been learned and what potential areas could be improved for the second strategy.

➢ **Mid-term Results of SDS I**

- Industry Canada has made good progress in addressing all three of its *Marketplace Climate* priority areas – i.e., marketplace rules and services; reasoned advocacy to shape sustainable development policy; and consumer choice and the marketplace. Many of the activities undertaken under this strategic objective have been completed or have moved beyond the scope of original action item commitments. A new action item was also added during the course of SDS I which involved United Nations' guidelines for consumer protection, i.e., to add a new sustainable consumption element in these UN guidelines.

- Under Industry Canada's *Innovation* SD objective, there were a total of ten action items in two key priority areas – i.e., innovation tools and practices, and technology development and diffusion. Examples of these action items include further investments in innovative clean production and enabling technologies through the *Technology Partnerships Canada* program[1], and working with industry, other government departments and other stakeholders to identify eco-efficiency indicators for improving the competitiveness and trade opportunities. Of these ten action items, half are substantially completed and the remaining five are making progress towards completion.

- In the *Trade and Investment* area, Industry Canada has made progress in continuing to support the Canadian government's efforts to encourage the export of Canadian knowledge, products, practices and technologies that further sustainable development objectives. For example, the department has negotiated bilateral cooperative agreements as a means to deliver capacity-building and technology transfer activities. It has also participated in the international fora to address how environmental and economic issues can be integrated at the global level. Working in partnership with other government departments, IC has contributed to meetings of the World Trade Organization's Committee on Trade and the Environment and of the United Nations Commission on Sustainable Development.

- Seven action items fall under Industry Canada's *Stewardship and Management* objective. Six of these action items relate to making better decisions based on continually improving awareness and understanding of the economic, environmental, and social implications of existing and proposed activities. The seventh action item relates to greening operations, with a goal of implementing the Greening Operations Action Plan to ensure that day-to-day physical operations at Industry Canada have minimal impacts on the environment. Two of the action items are substantially completed and progress is continuing on the other five.

---

[1] Effective November 18, 1999, the Technology Partnerships Canada program operates under new terms and conditions and references in this evaluation refer to TPC in a historic context. TPC does not request or consider information concerning the extent to which applicant or recipient enterprises do or may export.

- Generally, the department has made progress in establishing SD as an item of consideration within the decision-making processes of the department.

- While Industry Canada is certainly moving forward on greening its own operations, the department is finding it challenging to meet government requirements. More specifically, IC is establishing an appropriate Environmental Management System and is increasingly integrating environmental considerations into operational decisions. However, the department is only beginning to measure the extent of its use of raw materials, energy, water and other resources. At this stage, it is not clear whether Industry Canada will achieve all of the targets outlined in its Greening Operations Plan.

➢ **Factors that Facilitated SDS I**

- *Issues scan, consultations and interdepartmental discussions:* Consultations with clients and stakeholders, and discussions with other departments proved to be very valuable during the initial development stages of SDS I. This helped to clarify goals and share information on common concepts.

- *Industry Canada sustainable development "champions":* There is a core group of very capable, forward-thinking employees at all levels throughout the department who are very knowledgeable about sustainable development. Two senior managers have been designated as SD champions. The "Lead Officers" tasked with progressing on the action items from SDS I are committed to the successful progression of their respective action items, as are the managers of these responsibility centres.

- *Director General's SD committee and SD Network:* The DG's SD committee was a very useful forum to promote senior management awareness and buy-in to the SD process within the department. It also facilitated getting things accomplished (for example, it was instrumental in securing the funding for the SD projects underway). An SD Network also contributed to effectively distributing related information and seeking inputs.

- *Sustainable Development Unit:* This unit was instrumental in preparing SDS I and overseeing its implementation process (e.g. coordinate reporting on implementation and report to senior management). This unit was also responsible for the implementation of a number of action items such as the development of an SD training course for the department and the development of an SD web site. As a result of this activity there appears to be increased awareness of SD both by industry and internally within Industry Canada.

- *Monitoring and Reporting:* The reporting mechanism in place for SDS I helped to consolidate the initiatives underway, and to create an operational and management framework for the implementation and accountability of SDS I within the department.

- *Interdepartmental Cooperation:* Interdepartmental cooperation on a variety of fronts (e.g. Interdepartmental Network on SD, Interdepartmental Committee on Strategic Environmental Assessment, the Deputy Ministers Coordinating Committee on SD) have helped Industry Canada to implement SDS I.

- *Designated Responsibilities:* A clear designation of managers and officers responsible for each of the action items (as well as details on planned deliverables and schedules and a commitment of resources), has helped to effectively implement the commitments of the strategy.

➢ **Monitoring and Reporting**

- *Industry Canada established an ongoing reporting system to monitor the progress of implementing the SD strategy.* Managers and officers responsible for the SDS I action items provide input to a descriptive profile on each of the 28 initiatives every six months. These results are reported to senior management committees and the Deputy Minister on each occasion and are also included in Departmental Performance Reports and are available on the SD Web site.

- *The ongoing monitoring system is based on a clear articulation of expected near-term results.* Indicators to measure the extent to which results have been achieved are included in monitoring reports.

- *Management accountability requirements for reporting on results of SD initiatives are adequately met by the monitoring and reporting system in place.* The reports define departmental accountability for each action item, including the names of lead officers and RC managers. Strategic objectives and the overall SD goal are collectively the responsibility of the department and its senior management.

➢ **Performance Measurement**

- At the corporate level, performance measurement is about organizational commitment to strategic objectives and continuous progress. Results of performance measurement are intended to feed into the strategic process and to improve the program for future implementation of SD initiatives. At present, IC's performance measurement system relies heavily on meeting targets. The department, however, has scoped out performance measurement indicators in a draft *SD Evaluation Framework*, but only a few of the indicators appear to have been integrated into the SDS I strategy and reporting mechanisms.

- In general, performance measures/indicators are still being developed for the SD initiatives. A few initiatives have incorporated performance measures, but it seems that those measures in place (e.g., Web site hits, recycling audits) are not sufficient to assess the ultimate impact of the SD initiative. Performance measures could be improved to more directly address the SD targets and priorities set out by the department over the long term.

Lessons Learned and Recommendations for SDS II

Industry Canada has made considerable progress over the last two years to advance its sustainable development agenda through SDS I. The following recommendations and lessons learned from that experience can help the department build on and improve the process for SDS II so that governmental requirements are more effectively met and sustainable development can become an integral component of departmental culture.

- **Increase commitment and buy-in from senior management:** For SDS II to be successfully implemented beyond SDS I commitments, the new SD strategy needs to be perceived as a priority across the department. For example, a senior-level "champion" responsible for SD should be more clearly communicated to the department. This is perceived by many departmental officials to be necessary to facilitate the SDS II process and to "sell" the SD message to senior management.

- **Focus on key strategic areas:** SDS I is a strategy that addressed requirements of the *Guide to Green Government*. While the SDS I experience showed how important it is to consider SD as part of a broader framework, it also reflected a compendium of diverse initiatives. SDS II could focus more on those strategic areas that Industry Canada can make the greatest contribution and also on more integration into the decision-making framework of the department.

- **Increased private sector focus of strategy:** Some industries are quite advanced in SD implementation (e.g., chemicals industry). The department could survey these industries and prepare "best practices" to share with other industry partners and internally within the department. IC could also undertake a detailed assessment of industry or other stakeholder attitudes towards SD. This would help to understand whether business and consumers would accept proposed SD initiatives. It would determine what business is willing to adopt and how far they can be encouraged to implement SD practices. The extent to which voluntary codes and standards could be accepted by industry to integrate SD into their operations and practices should be included in such studies.

- **Capitalize on partnership opportunities:** There are perceived opportunities to improve existing partnerships for SD initiatives. The Industry Canada SD Unit could create more internal partnerships with branches/groups within the department (e.g., with EAB, OCA). Likewise, other responsibility centres could form more effective partnerships with the SD Unit. These internal partnerships could fill gaps in expertise and knowledge in various areas and create more effective delivery of SD in all relevant branches of the department. Interdepartmental working groups could be used more effectively to capitalize on other departments' work and ideas.

- **Promote better awareness of SD within the department:** There are opportunities to help many individuals within the department better recognize that their job responsibilities could have SD implications. The SDS I strategy is a sound document, but it appears that a majority of staff do not know (or have forgotten) that it exists. There are many good SD initiatives throughout the department (e.g. SD training course, related workshops and lectures), and several good papers on SD have been written by Industry Canada staff. More internal awareness initiatives could be used to promote SD during SDS II.

- **Continued relevance of SD initiatives:** Existing SD action items and proposed new initiatives should be reviewed periodically (i.e. as part of updating the new strategy every three years) to ascertain their relevance to advancing the department's sustainable development agenda. Factors that could be considered in this review include:

  - *The relative impacts of these initiatives on sustainable development.* How significant are these initiatives with respect to the overall framework of SDS I? There is a need for a more comprehensive evaluation to address this question and to determine the full impacts of IC's SD initiatives.

  - *The contribution to the long term vision of the department.* To ensure their continued and greater relevance, sustainable development initiatives should have a long-term orientation with an expected lasting impact. A clear sustainable development vision will help people focus on the strategy's ultimate goals.

  - *The scope of the initiative in developing partnerships with external stakeholders and other federal government departments.* Industry Canada's sustainable development initiatives clearly identify the partnering relationships required for the implementation of each action item. The effectiveness of these partnerships needs to be assessed. There are opportunities to continue to encourage partnerships with other government departments and private sector organizations in the following areas of SD concern: climate change; environmental assessments; responsible care initiatives; environmental practices of companies (including quality assurance and adoption of ISO 1400); measuring impacts of SD on productivity and economic growth.

- *The extent of performance measurement*. For SDS II, the department should consider compiling performance information on an ongoing basis. In this respect, more guidance from the office of the Commissioner of the Environment and Sustainable Development and from Treasury Board Secretariat, on SD-related performance indicators, would be useful.

- *Adequate resources*. For each initiative, more effort could be made to explicitly describe the resources necessary to complete the commitment.

- *Issues Scan for SDS II*. The continuing relevance of IC's SD initiatives needs to be assessed within the context of the new *Issues Scan* for SDS II.

1 Introduction

Industry Canada commissioned KPMG Consulting LP to undertake a mid-term evaluation study of the first Sustainable Development Strategy of the department (SDS I).

1.1 Context

Sustainable development within the federal government: In 1997, 28 federal government departments and agencies tabled their first sustainable development strategies in the House of Commons. The objective of these strategies was to operationalize sustainable development—to move it from a concept to a practice – by articulating what needed to be done by federal government departments.

SD strategies: Sustainable development has been integrated into both the *Department of Industry Act* and the *Auditor General Act*. Industry Canada's next sustainable development strategy (SDS II) must be tabled before the end of 2000. SDS II will have to satisfy a number of government-wide objectives, including those specified by *A Guide to Green Government* and other related objectives on the quality of our environment that were highlighted in the recent *Speech from the Throne*.

Mid-term evaluation: This mid-term evaluation study is part of a process for helping to develop the next sustainable development strategy of the department (SDS II). Two other studies have also been commissioned as part of this process: an "internal issues scan" (based on assessments of managers and professionals within the department), and an "external issues scan" (based on assessments of stakeholders and clients of the department). Both these issues scans are aimed at identifying key sustainable development issues that the department could address and the related opportunities or initiatives that could contribute to this process and that are relevant from the department's standpoint.

1.2 Objectives and Key Evaluation Questions

Objectives: The main objectives of this mid-term evaluation were to identify results and lessons learned from the first SDS I and to discuss the factors that facilitated and/or impeded the implementation of sustainable development initiatives within the department.

Key evaluation questions: The specific focus of the mid-term evaluation was centered on the following key evaluation questions:

- What is the relevance of the SDS I initiatives for Industry Canada? To what extent is SDS I consistent with the departmental mandate and goals? *[see Chapter 2]*

- What is the relevance of Industry Canada's SDS I initiatives for the government-wide sustainable development objectives? *[see Chapter 2]*

- What are the results achieved to date by SDS I? Did the department do what it said it would do? *[see Chapters 3 and 4]*

- What were the factors which facilitated implementation of SDS I? What are the factors that could impede SDS II? *[see Chapter 4]*

- What mechanisms are in place for monitoring and reporting on SDS I activities, and how effective are these mechanisms? *[see Chapter 5]*

- Does SDS I address how the department will measure, analyze and report performance? What opportunities exist to improve the department's capacity to measure performance?*[see Chapter 6]*

- What are the lessons learned, based on factors that might have impeded the progress of SDS I, that can be useful for SDS II? [*see Chapter 4 and Executive Summary]*

1.3 Approach

Consultations: The approach used for this study involved a series of interviews with 25 management and professional staff members of Industry Canada and of departmental clients and industry representatives (see Interview Guide in Appendix C). In addition, relevant results of interviews conducted as part of the "internal issues scan" (46 interviews) were blended with the mid-term evaluation interviews, particularly in the context of "lessons learned" from SDS I.

Self-assessment: The views expressed by individuals consulted who have been involved in SD departmental initiatives represent, to a large extent, a "self-assessment" by the department of SDS I. Interpretation of the results of the consultation process should be seen within a framework of this self-assessment.

Document review: In addition, as part of the approach for this mid-term evaluation, the study team undertook a review of relevant documents – including previous departmental reviews, various types of files and data, the draft SDS I Evaluation Framework study, monitoring reports, and reports of the Commissioner of the Environment and Sustainable Development, as well as Industry Canada's *Sustainable Development Strategy (1997)* document.

Team approach: While to a large extent this mid-term evaluation is based on a self-assessment, the approach for synthesizing the views of departmental officials involved a team of four consultants and Industry Canada sustainable development representatives. An iterative process involving brainstorming sessions among the team members, followed-up by validation of findings and conclusions with departmental officials, ensured that an appropriate "checks-and-balances" process was in place to use contextual and factual information that could shed light on the perceptions and evaluations.

1.4 Limitations

Only a "mid-term" evaluation: The scope of the work involved in this study is limited to a review of the mid-term results achieved to date by SDS I (based on an evaluation of approximately the first two years of a three-year strategy), and to identifying implementation challenges that appear to need addressing for the next phase of sustainable development initiatives by Industry Canada. A full evaluation of program impacts for achieving government-wide sustainable development objectives is not possible within the scope of this mid-term study, mainly because implementation of the SD program is still relatively recent within the department, and because sustainable development impacts are often long-term in nature.

Scope of consultations: While a good representative sample of officials from within the department were consulted (see Appendix B), it is not possible to claim that all potentially interested parties and branches within the department were surveyed.

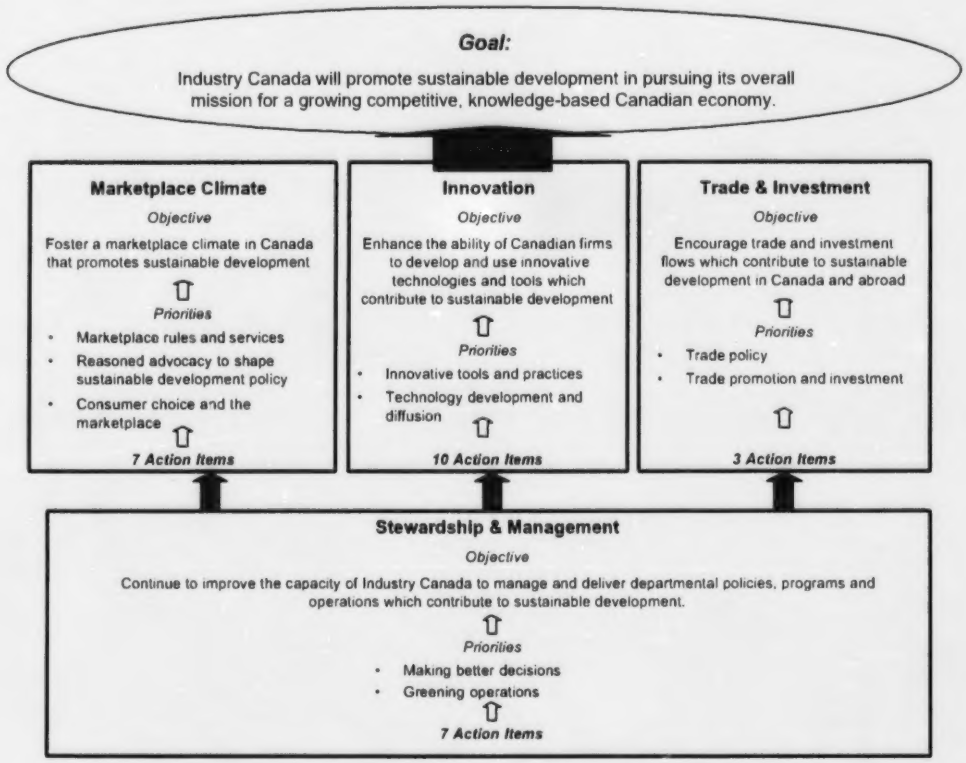
Methods: The methods used in this study were tailored to the tight time frame and resources available for investigating the lessons learned and results of SDS I. Consequently, a comprehensive review and analysis of all relevant documentation (notwithstanding the references consulted and listed in Appendix A); assessment of any substantive impacts of individual SD action items; and use of other effective consultation/evaluation methods (e.g., focus group discussions), were not pursued as part of this mid-term evaluation.

Moving up the learning curve: As characterized by the recent report of the Commissioner of the Environment and Sustainable Development (*Moving up the Learning Curve*, December 1999), the second generation of sustainable development strategies is being built on the lessons learned from the first phase. Officials consulted at Industry Canada consider themselves to be on a learning curve with regards to making SD-related initiatives work successfully. Because this report is built on the basis of a self assessment by these officials, it should be seen as only one step in a continuous improvement process towards "getting it right."

1.5 Program Profile and Logic Model

Industry Canada's first sustainable development strategy (SDS 1), is depicted graphically in Exhibit 1. The strategy outlines 27 action items that address nine priority areas under four objectives: Marketplace Climate, Innovation, Trade and Investment, and Stewardship and Corporate Management.

Exhibit 1: Program Profile for SDS I


Goal:
Industry Canada will promote sustainable development in pursuing its overall mission for a growing competitive, knowledge-based Canadian economy.
Marketplace Climate
Objective
Foster a marketplace climate in Canada that promotes sustainable development
Priorities
Marketplace rules and services
Reasoned advocacy to shape sustainable development policy
Consumer choice and the marketplace
7 Action Items
Innovation
Objective
Enhance the ability of Canadian firms to develop and use innovative technologies and tools which contribute to sustainable development
Priorities
Innovative tools and practices
Technology development and diffusion
10 Action Items
Trade & Investment
Objective
Encourage trade and investment flows which contribute to sustainable development in Canada and abroad
Priorities
Trade policy
Trade promotion and investment
3 Action Items
Stewardship & Management
Objective
Continue to improve the capacity of Industry Canada to manage and deliver departmental policies, programs and operations which contribute to sustainable development.
Priorities
Making better decisions
Greening operations
7 Action Items

The action items linked to each component of the department's SD program will be discussed later in Chapter 3 of this report. The expected results from these action items, are presented in the *Sustainable Development Strategy, Industry Canada, 1997* (pages 34 and 35). These were intended to be near term results. Exhibit 2 shows the linkages of the expected results of the SDS I to each of the nine priority areas.

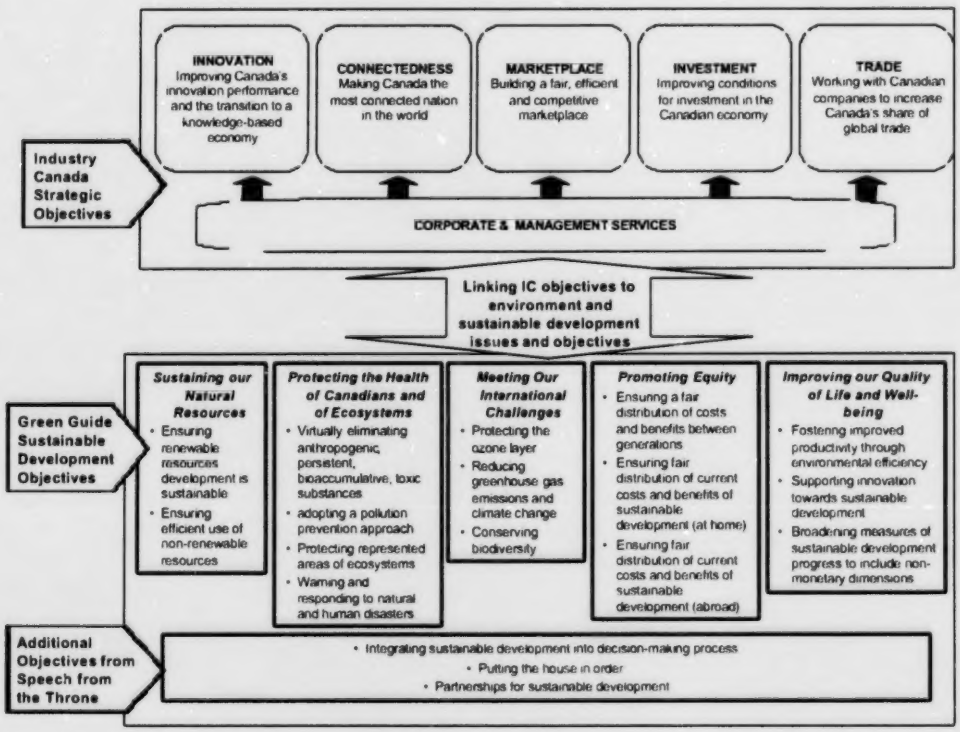
Exhibit 2: Linkage of Expected Results to Program Priorities

STRATEGIC OBJECTIVE	PRIORITY	EXPECTED RESULTS
Marketplace Climate To foster a marketplace climate in Canada that promotes sustainable development	Marketplace rules & services	➢ better understanding of links between Canada Business Corporations Act and sustainable development
	Reasoned advocacy to shape SD policy	➢ improved knowledge and collaboration in policy development and implementation on high-priority sustainable development challenges ➢ enhanced opportunity for innovative use of policy instruments ➢ enhanced awareness of potential application of voluntary initiatives by business
	Consumer choice & the marketplace	➢ improved integration of consumer perspectives into sustainable development
Innovation To enhance the ability of Canadian firms to develop and use innovative technologies and tools which contribute to sustainable development	Innovative tools and practices	➢ increased integration of sustainable development perspective in Sector Competitiveness Frameworks ➢ demonstrating through business case studies the benefits of implementing environmental management systems such as ISO 14001 ➢ enhanced support and encouragement for using the voluntary standards system as a tool to promote sustainable development
	Technology development and diffusion	➢ development and adoption of new technologies supportive of sustainable development objectives ➢ enhanced awareness of the potential application of eco-industrial parks ➢ better understanding of opportunities for potential development of technologies supportive of sustainable development ➢ revised Canadian Environment Solutions to provide new information for business on enabling information and communications technologies ➢ better understanding of the barriers to diffusion of information and communication technologies, as well as clean-production technologies
Trade and Investment To encourage trade and investment flows which contribute to sustainable development in Canada and abroad	Trade policy	➢ continued participation on Canadian delegations so that stakeholder interest are represented in a manner that balances economic and environmental objectives ➢ cooperation among key federal departments on the formulation of policy guidelines for the purposes of negotiating international environmental agreements
	Trade promotion & investment	➢ improved access to domestic and global market opportunities ➢ improved marketing of Canadian environmental companies
Stewardship and Management To continue to improve the capacity of Industry Canada to manage and deliver departmental policies, programs and operations which contribute to sustainable development.	Making better decisions	➢ enhanced integration of sustainable development criteria in relevant program evaluation frameworks ➢ policy research on the factors that contribute to sustainable development in a knowledge-based economy ➢ enhanced awareness of sustainable development challenges among Industry Canada managers and staff
	Greening operations	➢ establishment of an appropriate environmental management system with relevant baseline data ➢ increased integration of environmental considerations into operational decision and the department's planning system ➢ assurance that Industry Canada meets or exceeds the letter and spirit of federal environmental laws and where appropriate, is compatible with provincial and international standards

The context in which Industry Canada's SDS II will be developed is expected to reflect findings and recommendations from the next round of consultations with the department's stakeholders and clients, with officials from other government departments, and with Industry Canada managers and professional staff.

This new context for SDS II is presented in Exhibit 3. Industry Canada's five strategic objectives, as described in the Industry Canada document *Making a Difference – Our Priorities for 1999-2000* are linked to the sustainable development objectives from the *Guide to Green Government* and the objectives summarized from the 1999 *Speech from the Throne*.

Exhibit 3: Current Context for SDS II Issues Scan


Industry Canada Strategic Objectives
INNOVATION
Improving Canada's innovation performance and the transition to a knowledge-based economy
CONNECTEDNESS
Making Canada the most connected nation in the world
MARKETPLACE
Building a fair, efficient and competitive marketplace
INVESTMENT
Improving conditions for investment in the Canadian economy
TRADE
Working with Canadian companies to increase Canada's share of global trade
CORPORATE & MANAGEMENT SERVICES
Linking IC objectives to environment and sustainable development issues and objectives
Green Guide Sustainable Development Objectives
Sustaining our Natural Resources
• Ensuring renewable resources development is sustainable
• Ensuring efficient use of non-renewable resources
Protecting the Health of Canadians and of Ecosystems
• Virtually eliminating anthropogenic, persistent, bioaccumulative, toxic substances
• adopting a pollution prevention approach
• Protecting represented areas of ecosystems
• Warning and responding to natural and human disasters
Meeting Our International Challenges
• Protecting the ozone layer
• Reducing greenhouse gas emissions and climate change
• Conserving biodiversity
Promoting Equity
• Ensuring a fair distribution of costs and benefits between generations
• Ensuring fair distribution of current costs and benefits of sustainable development (at home)
• Ensuring fair distribution of current costs and benefits of sustainable development (abroad)
Improving our Quality of Life and Well-being
• Fostering improved productivity through environmental efficiency
• Supporting innovation towards sustainable development
• Broadening measures of sustainable development progress to include non-monetary dimensions
Additional Objectives from Speech from the Throne
• Integrating sustainable development into decision-making process
• Putting the house in order
• Partnerships for sustainable development

A new set of action items, and related results from these action items, would be expected to be identified to reflect the new SDS II context.

2 Relevance of SDS I Initiatives to Industry Canada

This chapter of the report discusses the relevance of Industry Canada's sustainable development initiatives, the consistency of SDS with the department's mandate and goals, and identifies some opportunities to further tie Industry Canada initiatives to government-wide SD priorities.

2.1 Continuing Relevance of Initiatives

Industry Canada's sustainable development strategy initially presented twenty-seven relevant initiatives for implementing sustainable development within the Department's internal and external operations. An additional initiative concerning United Nations SD guidelines for consumer protection was later added to the list of action items. All Industry Canada's original initiatives appear relevant to the Department and to sustainable development.

While Industry Canada is not an environmental department per se, its mandate is compatible with the goals of sustainable development. Sustainable development is not just the protection of the environment. It includes the efficient and environmentally responsible use of all of our scarce resources—natural, human and economic. The sustainable development equation includes the social, economic and environmental areas that lead to an improved quality of life and well being. Environmental protection need not be viewed as a barrier to economic development. Rather, a healthy economy stimulates job growth and wealth necessary to foster research and development and to make investments necessary to ensure a healthy environment. Consequently, Industry Canada's mandate and sustainable development are compatible.

However, the continued relevance of the SD initiatives, from the standpoint of the department, are contingent on several factors including:

- *Scope* of the initiative in developing partnerships with external stakeholders and other federal government departments.
- *Extent of completion* of each initiative.
- *Relative impacts* of the initiative on sustainable development.
- *Long term versus short term focus* of each of the initiatives.
- *Extent of integration* of initiative into the department's overall mandate and strategic directions.

The scope of the sustainable development initiative in developing partnerships with external stakeholders and other federal government departments: For continued relevance, Industry Canada's sustainable development initiatives need to be broad-based and include action plans that involve external stakeholders and other federal government departments. Currently, Industry Canada's sustainable development initiatives identify partnering relationships required for the implementation of each action item, but they do not explicitly state how and to what extent the department will work with others to achieve their goals. The implementation of the sustainable development initiatives requires teamwork and a coordinated and strategic approach to developing partnerships with stakeholders and clients in implementing specific areas of shared responsibility for sustainable development. Continued relevance of the initiative will be contingent on the extent to which the initiative is externally focused, broad-based and involves active projects with the private sector and other federal departments.

The extent of completion of each initiative: Chapter 3 in this report shows that the discrete action items of the 28 initiatives have already been substantially completed, or are moving beyond original commitments, and, with the exception of one action item where it is too early to judge, all the action items are currently making progress according to plan. There are a few initiatives that have not only met but exceeded their objectives as stated in the SD action plans of the department (e.g., Climate Change). New action items for these sustainable development areas should be considered consistent with findings from the issues scan reports and in consultation with stakeholders and clients of the department. Since tabling the SD Strategy there has been one new action item identified (i.e., United Nations guidelines for consumer protection).

Relative impacts of the initiative for sustainable development: Several respondents in our interviews commented that although the sustainable development initiatives were relevant some were, from their perception, either too vague (e.g., trade) or not overly ambitious (e.g. greening operations) in terms of their relative impacts for sustainable development. Other respondents felt that the actions were pragmatic and were making an incremental contribution. For continued relevance, Industry Canada could revisit some of the original initiatives and aim to develop clearer and more concrete action plans that could deliver specific, measurable results, and meaningful impacts, for sustainable development.

The long term versus short term focus of each of the initiatives: Sustainable development is a long term commitment. A general comment from a few stakeholders in our interviews was that Industry Canada's SD Strategy and initiatives, from their perceptions, were not far reaching enough and focused primarily on the short term. Others noted that the initiatives were framed to reflect the needs of the *Guide to Green Government* and such parameters as the budgetary cycle. For continued and greater relevance for sustainable development, some initiatives could also have a long term orientation.

The extent of integration of SD initiatives into the department's overall mandate and strategic directions: All factors considered, Industry Canada could revisit the existing sustainable development initiatives and assess their continued relevance with respect to whether or not these initiatives are broad-based and external focused, have direct impacts for sustainable development, require additional and more concrete action plans for completion and/or a longer term orientation for sustainable development. Further, these initiatives, could be assessed on the basis of the results of the new *Issues Scan* for SDS II as well as on subsequent consultations with stakeholders and clients of the department.

2.2 Consistency of SDS with Departmental Mandate and Goals

In general, the Sustainable Development Strategy is consistent and compatible with Industry Canada's mandate – to help make Canadians more productive and competitive in the global, knowledge-based economy, and the department's goals. Exhibit 1 in Chapter 1 depicts the logical relationships between the SDS I priorities and the key strategic areas of the department. Exhibit 3 provides a more recent context for SDS II that reflects Industry Canada's changed strategic directions as they were presented in the departments strategy, *Making a Difference: Our Priorities for 1999-2000.* Exhibit 3 also provides the overall context for the government-wide SD program as identified in *A Guide to Green Government* and the *Speech from the Throne (1999).*

Often sustainable development is defined and understood solely in environmental terms with little emphasis made to the efficient and environmentally responsible use of economic resources which also leads to an improved quality of life and well being.

To date, the department has made the strongest link with sustainable development through its *innovation and marketplace* objectives. However, the department's contribution to SD appears to be less clear with respect to *connectedness* – largely because the connectedness strategic objective did not exist when SDSI was developed. Since the objectives of innovation and connectedness may be directly related, the opportunity exists for Industry Canada to make improvements on how to highlight the sustainable effects arising from both of these objectives.

Although SDS I is relevant and consistent with the departmental mandate and goals, Industry Canada could do more to integrate sustainable development with its corporate objectives. To deliver on its mandate, the department could take further steps to explicitly link sustainable development with relevant programs and policies. To meet sustainable development goals, Industry Canada could do more to factor in environmental considerations into its operational activities, especially those with a long term orientation and impact.

There are potential opportunities for establishing greater consistency between the sustainable development strategy and the departmental mandate and goals. One potential opportunity could involve improving the current level of provincial integration in the sustainable development strategic process – although it is not clear where. Further, given that the regions and headquarters have similar policies, programs and operations which involve the integration of environmental considerations, Industry Canada could put more effort in including regional stakeholders in the planning process where warranted.

Another potential opportunity for establishing greater consistency between the strategy and departmental goals and mandate is to increase the level of meaningful interaction with the private sector throughout the strategy period. The first strategy (SDS I) established an interactive consultation process with external stakeholders early in the design stage. Industry Canada is continuously involved with stakeholders in the specific implementation of individual action items. There could be room for further interaction with stakeholders on the general implementation of the strategy – but it is not clear where.

2.3 Opportunities to Tie Industry Canada's Initiatives to Government-wide SD Priorities

Since December 1997, twenty-eight departments and agencies have been making progress on their first sustainable development strategies. Advancing the federal government's sustainable development agenda has been a learning experience and continues to be a challenge for all departments. Bearing this in mind, there may be more opportunities for Industry Canada and all other departments to work together and share responsibility for moving the sustainable development agenda forward. Our consultations with departmental and external stakeholders highlighted some of the following key potential opportunities to further tie Industry Canada's initiatives to government-wide sustainable development priorities:

Climate Change: Industry Canada could continue to look at emerging climate change issues for industry and be proactive in this context. The department could perhaps be more engaged in watching how these issues impact the economy and the environment. The department could continue to have dialogue with the private sector and to collaboratively tackle climate change issues with private companies and other government departments. Some specific opportunities for Industry Canada to address climate change are highlighted in Exhibit 4.

Exhibit 4: Climate Change SD Opportunities

RELEVANT IC STRATEGIC OBJECTIVE	CLIMATE CHANGE SD OPPORTUNITIES
Innovation	**Developing Technology:** A key prong in Industry Canada's climate change strategy is the development of enabling technologies. Opportunities exist for the department to address the commercial benefits of some of these initiatives. Industry Canada can promote the development of such technology, and can also keep industry informed on what technology exists and how industry can benefit from technology to meet climate change targets. Through *Technology Early Action Measures (TEAM)*, a partnership with Environment Canada and Natural Resources Canada, Industry Canada is developing and showcasing Canadian climate change technologies. The program is providing Industry Canada opportunities to encourage innovation in technology in certain industry sectors so that the sectors will better be able to meet emission goals. **Developing Strategies:** Part of the challenge in addressing climate change is helping individual firms develop workable strategies to deal with climate change. By supporting and continuing to get involved in working groups, like the Friday Group (a small industry working group made up of senior executives from private sector firms who are concerned about climate change), Industry Canada has an opportunity to help firms adopt new technology. **Promoting Awareness:** Many private sector companies (specifically the individuals running these companies) are not aware of the importance of the climate change issue – there is a lack of understanding of what can be done to address the issue. The *National Climate Change Process*, an issues table in partnership with industry, is an opportunity for Industry Canada to reach-out more broadly to industry and to involve a greater number of people in the climate change challenge.
Marketplace	**Promoting Awareness:** Ninety-seven percent of Canadian firms are small to medium sized enterprises. They tend to focus on surviving in the short term—most SMEs do not have in-house resources available for environmental functions, nor do they have the resources to take advantage of international standards of compliance. As a result, it may be difficult for many Canadian companies to meet climate change targets. Industry Canada has already identified ways to provide SMEs with relevant climate change information. Nevertheless, opportunities exist for Industry Canada to: • extend the reach of climate change related information fairs so that a larger percentage of SMEs benefit from the information made available at these events; • broaden the range of SME related climate change information included in Strategies and BEPO.
Trade	**Technology development:** Industry Canada can further the climate change objectives by participating in emissions technology development and by promoting SD technologies that Canada can adopt. Through trading and through the development of innovation and new technologies, companies can reduce the effects of climate change and profit economically through trade.

ISO 14000: There continues to be an opportunity for ISO 14000 to be one of the drivers for sustainable development. Industry Canada could re-examine how ISO 14000 can benefit companies in addressing SD-related concerns and trade-related issues. The department could examine the benefits and drawbacks to companies of having an environmental management system (EMS). ISO 14000 is supposed to benefit companies through decreased inspections, greater public recognition, and improved competitiveness in world markets. Today, ISO 14000 is seen as a good marketing tool and yet many companies (especially SMEs) are not adopting it due to short term costs required for implementation. However, if the market and a critical mass of companies follow ISO 14000, others may follow. Many companies in European countries (e.g., Sweden, Germany and France) already have environmental standards and are driven by these standards. These developed countries may be competitively ahead in terms of meeting environmental standards and they may not commit to trade contracts with Canadian firms that are not meeting the ISO 14000 SD-related standards.

Responsible Care: This is a voluntary program that started in Canada and is now in 45 countries around the world. "Responsible Care" represents a voluntary approach taken by the Canadian Chemical Producers Association (CCPA) to achieve six sustainable codes of practice that consider environmental and life-cycle issues from "cradle to grave" in the chemicals sector. Once a private sector firm is a member of Responsible Care it is supposed to be very easy for it to get accreditation in compliance to ISO standards, since the company's internal processes would then be considered to be already self-sustaining. The Minister of Industry Canada and the Minister of the Environment signed a memorandum of Understanding with the CCPA to reinforce the program by encouraging and publicly recognizing the progress of the association and its members. There could be opportunities for Industry Canada to support similar voluntary initiatives by other associations.

Environmental Practices of Companies: Companies and shareholders are concerned about liabilities. Employees and the community are more secure when companies have good environmental records of behaviour. With sound environmental practices, the liabilities of stakeholders decrease and there is increased support by employees and the community. This translates into a better company image in the marketplace and ultimately a stronger economy. The opportunity for IC is to help companies integrate environmental practices in their core activities to decrease the liabilities associated with environmental surprises. The department could take the lead on policy research and information gathering to determine how companies can increase profitability and decrease liability by building a strong business case that incorporates environmental practices.

Canadian Business Environmental Performance Office (BEPO): BEPO is considered to be an excellent on-line database tool for business which identifies SD best practices on a sectoral and provincial basis. These best practices help show industry how to grow while following SD best practices. Industry Canada could continue to promote BEPO to support SMEs in their SD practices and to help improve environmental performance.

Advocacy of Policy: There are different perspectives and expectations on what the nation could be doing towards addressing SD issues. Environmentalists want to protect the environment; private sector sees economic growth, employment and wealth as key priorities; and non-profit and non-government organizations (NGOs) do not particularly focus their concerns on productivity and competitiveness but on public interests and issues of health and quality of life. Industry Canada sees its continuing role in building a strong competitive economy tied to improving technology development and innovation, and to information sharing and investment in economic growth initiatives. With respect to contributing to the SD goals, IC could continue its dialogue and consultation with its clients and stakeholders, and share in the process of advocating sound SD policies which lead to national benefits to all the participants in the Canadian economy, whether these be industry, non-profit organizations, or the general public.

Other SD Opportunities: The internal issues scan that was undertaken by Industry Canada, as part of the process for developing SDS II, discusses a number of other opportunities that can be a basis for discussions on collaboration with stakeholders and other government departments on SD-related initiatives.

3 Mid-Term Results of SDS I

This chapter of our report discusses the mid-term results of Industry Canada's *Sustainable Development Strategy, 1997* (SDS I). It is divided into four sections, each of which represents an IC sustainable development objective as defined in SDS I. The overall SD goal of the department is to promote sustainable development in pursuing its overall mission for a growing competitive, knowledge-based Canadian economy. Within this overarching goal four key objectives are defined:

- Marketplace Climate: to foster a marketplace climate in Canada that promotes sustainable development.
- Innovation: to enhance the ability of Canadian firms to develop and use innovative technologies and tools which contribute to sustainable development.
- Trade and Investment: to encourage trade and investment flows which contribute to sustainable development in Canada and abroad..
- Stewardship and Management: to continue to improve the capacity of Industry Canada to manage and deliver departmental policies, programs and operations which contribute to sustainable development.

Each section of this chapter begins by setting out the SD priorities associated with IC's SD objectives. The sections continue by listing relevant SD action items in table form. These tables summarize and comment on key activities the department has undertaken in order to complete each action item. Finally, the sections discuss whether or not IC is on track to meet the commitments and targets it set in SDS I. The goals referred to in these discussions are the expected near-term results that IC set out by priority area in SDS I.[1] These goals and expected results are also summarized in Chapter 1, Exhibits 1 and 2.

The chapter is based on information and perceptions gathered from the consultation process and from information found in SDS I, the *Strategy Action Items List* (September 30, 1999) and Industry Canada's most recent SD Status Reports (various dates).

[1] *Industry Canada, Sustainable Development Strategy (1997)*, pp. 34-35.

3.1 Marketplace Climate

In SDS I, IC set out a marketplace objective to "foster a marketplace climate that promotes sustainable development". The department defined the following three priority areas that relate to this objective:

- **Marketplace rules and services:** assess the links between marketplace "ground rules" and sustainable development.
- **Reasoned advocacy to shape sustainable development policy:** bring economic, competitiveness, trade and consumer expertise and concerns to policy development which supports sustainable development.
- **Consumer choice and the marketplace:** draw consumers more effectively into the promotion of sustainable development by raising awareness and providing information.

Eight action items fall under Industry Canada's Marketplace Climate objective. Only one action item (action item 1) is related to the department's marketplace rules and services priority. Four action items (action items 2-5) fall under the reasoned advocacy priority, while three action items (action items 6-7 and 28) relate to consumer choice in the marketplace. Action item 28 is so numbered because the department added it in 1998 after the inception of the SD strategy.

The table below (Exhibit 5) summarizes and comments on IC's progress in completing these Marketplace Climate action items.

Exhibit 5: Mid-term Results: Marketplace Climate (to foster a marketplace climate in Canada that promotes sustainable development)

Action Item	Level of Completion	Comments
Priority Area: **Marketplace Rules and Services**		
1. Study on marketplace framework laws and sustainable development	• study completed in March 1998 • pilot project evaluated proposed amendments to the CBCA from a SD perspective	completed
Priority Area: **Reasoned Advocacy to Shape Sustainable Development Policy**		
2. Reasoned advocacy to shape environmental policy	• extensive consultation with industry and other stakeholders • co-operating with other government departments • participating in relevant international meetings • contributing to Bills, and writing papers	progress ongoing

Action Item	Level of Completion	Comments
3. Analysis of climate change	• developed methodology to carry out analysis on key sectors to examine opportunities and impacts of climate change • co-sponsored the Industry Table – continued involvement in developing options for a National Implementation Strategy • co-chair of the Technology Early Action Measures • holding workshops marketing climate technologies abroad • expanding information products so that they can better address climate change issues	department's focus expanded from analysis to action (i.e. development of innovative clean-production technology)
4. Voluntary Codes Guide	• Voluntary Codes Guide published and distributed • developed web site devoted to voluntary codes • completed an evaluation framework for voluntary codes	moved beyond scope of original action item
5. Voluntary approaches to environmental management	• helped develop initiatives to help industry develop and use more environmentally focused codes of practices, guidelines and other voluntary initiatives • made various presentations on the role of voluntary approaches • completed an inventory of voluntary initiatives in Canadian industrial sectors	progress on track
Priority Area: **Consumer Choice in the Marketplace**		
6. Financial support and technical assistance to consumer groups	• funding a variety of projects that address consumer information (e.g. developing marketplace information tools for SD, environmental labeling)	progress ongoing
7. Facilitate networks and partnerships	• brought together consumer, environmental and other public interest groups with industry associations and members of the academic community to provide external advice to the department on selected topics • completed report on greener products in the marketplace	progress ongoing
28. United Nations' guidelines for consumer protection[1]	• a sustainable consumption element included in the UN Consumer Protection Guidelines	completed

[1] Industry Canada added this 28th action item in 1998.

As Exhibit 5 shows, IC has undertaken a broad range of activities in order to complete marketplace climate action items. The department has fulfilled or exceeded requirements connected to action items 1, 3, 4 and 28, and is making progress towards completing action items 2, 5, 6 and 7.

Key mid-term results include:

- The focus of IC's climate change action item has expanded from analysis to action, i.e. the development of clean-production technologies.
- A Voluntary Codes Guides has been published and Voluntary Codes are now available on line.
- Other studies, reports and discussions related to sustainable development and marketplace climate have been undertaken to expand the knowledge base.

The bullets above only highlight key results. The discussion that follows expands on the status of the action items and justifies whether or not the department is on track to meet the SD goals it set out in SDS I.

Action item 1, a study of marketplace framework laws and SD, addresses the marketplace priority. IC commissioned a report, *A Framework for Identifying the Linkages between Marketplace Framework Legislation and Sustainable Development*, that was prepared in March 1998. It then ran a pilot project that developed a general framework for situating marketplace legislation from a SD perspective based on economic, environmental and social impacts. The department used the framework provided by the pilot project to evaluate proposed amendments to the *Canada Business Corporations Act* (CBCA) from a sustainable development perspective.

In SDS I, IC defined its goal in this priority area as gaining a "better understanding of the links between the CBCA and SD". The report completed in March 1998 met this requirement. Subsequent activities have moved beyond the scope of the original action. Likewise, regarding action item 4, the preparation of a voluntary codes guide, an action item related to the advocacy priority area, IC has moved beyond the scope of the action item. The department set out to make government, business, consumers and environmental groups more aware of the conditions under which voluntary codes are most likely to be successful. By publishing the *Voluntary Codes Guide* the department fulfilled its goals, but by putting the information on line and by completing an evaluation framework for voluntary codes, including those related to SD, the department has exceeded its stated intentions.

Climate change, action item 3, is a much bigger priority for the government and the department now than it was when SDS I was written. The action item called for an analysis on economic, trade, competitiveness, consumer and related marketplace factors in relation to the climate change issue. The expected deliverables were reports and studies. SDS I did not set out a specifically climate change oriented goal. It participated in the management and operation of issues tables to develop a national implementation plan and is encouraging and supporting the development of clean-production technologies. The department's role in the climate change challenge has evolved to one of ensuring that companies remain competitive and operate in a regulatory environment that allows them to make long-term investments that are good for business and good for the environment.

Industry Canada is also on track to complete action items 2 and 5. Through consultation with industry and other stakeholders, and by preparing a variety of reports, IC has made progress on bringing expertise on economic, trade, competitiveness, consumer and related marketplace factors into policy development and implementation on high priority environmental/economic files. It has also worked in partnership with government departments, business and other stakeholders to develop and encourage effective and innovative use of policy instruments for environmental management with a major focus on voluntary initiatives.

The department has taken some constructive first steps in the area of consumer choice and sustainable development (progress is ongoing with respect to action items 6 and 7). This is an area where there has been little work done in general within the public or private sectors. The department is providing funding for a range of consumer related matters including environment and SD issues and facilities networks and partnerships between consumer groups and other government departments and public interest groups on priority areas related to SD. Its work in this area has focused on building capacity of consumer groups – and building linkages between these groups and environmental and business groups – to identify issues and actions which will help consumers make choices consistent with sustainable development. Current work by non-government organizations, funded by IC, on green energy is focused on the development of information which can help consumers make energy choices which help to mitigate climate change. To fully meet the priority of drawing consumers more effectively into the promotion of sustainable development by raising awareness and providing information, IC may need to move beyond research and into the promotion and development of consumer information products.

It is worth noting that IC added an action item to this priority area. The new action item, action item 28, set out to amend the UN Guidelines for Consumer Protection to include an element on sustainable consumption. IC delegates contributed to consultation on the issue. The action item is now complete, a sustainable consumption element was added to the Consumer Protection Guidelines in 1999.

3.2 Innovation

In SDS I, IC set out an innovation objective to "enhance the ability of Canadian firms to develop and use innovative technologies and tools which contribute to sustainable development". The department defined the following two priority areas that relate to this objective:

- **Innovative tools and practices**: work in partnership with industry to develop innovative tools and practices which improve business and environmental performance;
- **Technology development and diffusion**: encourage the development and diffusion of clean-production and enabling technologies that produce long-term environmental benefits.

Ten action items fall under Industry Canada's Innovation objective. Four of these (action items 8-11) are related to the innovation tools and practices priority. Six action items (action items 12-17) fall under the technology development and diffusion priority.

The table below (Exhibit 6) summarizes and comments on IC's progress in completing these Innovation action items.

Exhibit 6: Mid-term Results: Innovation (to enhance the ability of Canadian firms to develop and use innovative technologies and tools which contribute to sustainable development)

Action Item	Level of Completion	Comments
Priority Area: **Innovation Tools and Practices**		
8. Sector competitiveness frameworks	• overview and prospects for many industry sectors have included SD considerations (ongoing) • produced a draft report that examines a number of issues related to the findings of the O&P documents (continually being updated)	progress on track
9. Business case to implement ISO 14001	• project completed June 1999 • variety of reports published and underway • working with other organizations to promote awareness and use of environmental management systems	completed
10. Eco-efficiency indicators	• prepared preliminary overview of existing, planned and potential of eco-efficiency	completed
11. Voluntary standards system	• Funding/sponsoring standards related projects (2 completed, 3 underway) • Published a guide that promotes the use of the National Standards System	progress ongoing

Action Item	Level of Completion	Comments
Priority Area: **Technology Development and Diffusion**		
12. Technology Partnerships Canada and sustainable development	• significant investment in environmental projects has leveraged additional private sector investment (projects have included clean process technologies, alternative fuels/energy, pollution prevention technologies)	progress on track
13. Eco-industrial parks	• undertaken studies and put on workshops to promote the integration of eco-industrial parks	substantially completed
14. Sustainable development roadmaps reports	• identifying technologies sensitive to SD issues (aircraft manufacturing, repair and overhaul TRM, forest operations TRM, wood-based panel TRM, geomatics TRM) • developing new TRMs that identify enabling technologies suitable to address SD issues	progress on track
15. Sustainable development Web site	• developed SD Web site with range of pages • continually adding links, documents and pages to the site	substantially completed
16. Canadian environmental solutions	• significant advancement of initiative to date, i.e. 73% of companies updated, launching a Polish version of CES, developed a climate change section in collaboration with NRCan	substantially completed
17. Cross-sectoral diffusion of technologies: Study 1: Clean production technologies that promote SD; Study 2: Enabling ICTs that promote SD	• both studies completed	substantially completed

As Exhibit 6 shows, IC has undertaken a broad range of activities in order to complete innovation related action items. The department has substantially completed requirements connected to action items 9, 10, 13, 15, 16 and 17 and is making progress towards completing action items 8, 11, 12 and 14.

Key mid-term results include:

- *Technology Partnerships Canada* (TPC)[1] has invested considerably in SD oriented projects.
- IC undertook a project to explore the business case for SMEs to implement ISO 14001 and concluded that building a convincing case would be challenging.
- Progress has been made in identifying opportunities to use eco-efficiency indicators for improving competitiveness and trade opportunities.
- The department has promoted the National Standards System.
- Technology roadmaps are uncovering opportunities to address SD issues, but more SD oriented roadmaps are needed for the initiative to have a real impact.

The bullets above only highlight key results. The discussion that follows expands on the status of the action items and explains whether or not the department is on track to meet the SD goals it set out in SDS I.

Regarding action item 8, Sector Competitive Frameworks (SCFs), IC is on track to meet its SDS I goal of an "increased integration" of SD into SCFs. In partnership with other industry sectors, IC has helped draft a report, *Industrial Development Issues in a Changing Global Environment*, that reflects SD issues in approximately 17 "Overview and Prospects" documents (O&Ps). The O&Ps examine trends and prospects for certain sectors and outline "Frameworks for Action" (implementation steps) that are meant to increase competitiveness and promote SD. Finally, IC plans to publish a report on SCFs. The publication of this report will complete the action item.

Action item 9, the business case to implement ISO 14001, relates to IC's innovative tools and practices priority area. While the department successfully completed the action item, it concluded that there is limited room at this time to build a strong business case for SMEs to implement ISO 14001. While it demonstrated some "benefits of implementing environmental management systems", a strong convincing case requires further analysis. The department learned that it is very difficult to reach the SME level with ISO 14001 since the reporting system required for ISO 14001 is too costly and resource intensive for small companies. Nevertheless, the department is continuing to raise awareness of SD issues, is exploring new evidence and opportunities and is promoting the use of environmental management systems among SMEs.

---

[1] Effective November 18, 1999, the Technology Partnerships Canada program operates under new terms and conditions and references in this evaluation refer to TPC in a historic context. TPC does not request or consider information concerning the extent to which applicant or recipient enterprises do or may export.

Industry Canada has completed action item 10, eco-efficiency indicators. IC is working with industry, other government departments and other stakeholders to identify opportunities to use eco-efficiency indicators to improve competitiveness and to open trade opportunities for Canadian companies in key sectors. By preparing an overview of existing, planned and prospective eco-efficiency indicator work, IC has met its goal of identifying "the potential uses of eco-efficiency indicators for enhancing business applications through selected research".

IC has made considerable progress completing action item 11 (voluntary standards system). By funding seven projects that help to advance voluntary standards systems that promote SD and by initiating a related survey on ISO 14000, Industry Canada has provided "support and encouragement for using the voluntary standards system as a tool to promote SD through Standards Council of Canada representation".

Many of the action items that fall under the technology development and diffusion priority area are substantially completed. Industry Canada has promoted the integration of eco-industrial parks through workshops and studies (action item 13), has added links and documents to its already established SD web site within *Strategis* (action item 15), has already released the *Canadian Environmental Solutions* database update version 4.1 as of September 1998 (action item 16), and has completed two studies to identify the benefits of and barriers to the cross-sectoral diffusion of technologies that contribute to sustainable development (action item 17).

Action item 12, Technology Partnerships Canada (TPC), is on track to meet IC's goal of developing and adopting new technologies that support SD objectives. TPC has invested some $52 million in 16 technologies which have leveraged an additional $120 million. As well, an agreement has been established with NRCan and the Climate Change Secretariat whereby TPC is a key delivery agent for the disbursement of funds to ensure the support of early action projects under the Climate Change Action Fund (CCAF).

Finally, in SDS I, IC set out to use technology roadmaps (action item 14) to gain a better understanding of opportunities for the potential development of technologies supportive of SD objectives by selected industry sectors. The department is on track to meet this goal – the wood-based panel roadmap has identified two types of critical technologies sensitive to SD issues; the geomatics roadmaps has identified numerous technologies that are being used and that have applications to help resolve SD issues. Considerable opportunities exist to develop a greater number of roadmaps, but it is important that the number of roadmaps in existence remains manageable so that the department can fully carry them through.

3.3 Trade and Investment

In SDS I, IC set out a trade objective to "encourage trade and investment flows which contribute to sustainable development in Canada and abroad". The department defined the following two priority areas that relate to this objective:

- **Trade policy**: promote the establishment of international rules which further the objectives of sustainable development;
- **Trade promotion**: encourage export of Canadian knowledge, products, practices and technologies which further the objectives of sustainable development.

Three action items fall under Industry Canada's Trade and Investment objective. Two action items (action items 18-19) relate to the trade policy priority; one action item (action item 20) falls under IC trade promotion and investment priority.

The table below (Exhibit 7) summarizes and comments on IC's progress in completing these Trade and Investment action items.

Exhibit 7: Mid-term Results: Trade and Investment (to encourage trade and investment flows which contribute to sustainable development in Canada and abroad)

Action Item	Level of Completion	Comments
Priority Area: **Trade Policy**		
18. Integration of trade and environmental issues at global level	• participating in relevant WTO committees , UN Commission on SD, OECD and North American Commission on Environmental Co-operation meetings. • helping to develop guidelines on the issue of trade and extended producer responsibility	progress ongoing
19. Policy guidelines for rules framework	• participating in relevant negotiations and conferences	progress ongoing
Priority Area: **Trade Promotion and Investment**		
20. Canadian Environmental Industry Strategy (CEIS)	• developed a draft targeted growth strategy for the environment industry - seeking approval and resources for the strategy • launch of Virtual Offices • facilitated alliance of environmental companies to pursue export markets • opened up new business opportunities in other countries • launched a Canadian version of the *Environmental Business Journal* • negotiated bilateral cooperative agreements to deliver capacity-building and technology transfer activities	moved beyond scope of original action item

As Exhibit 7 shows, IC has undertaken a broad range of activities in order to complete trade and investment related action items. The department has substantially completed action item 18, has exceeded the scope of action item 20 and has made progress towards completing action item 19.

Key mid-term results include:

- IC is playing a role internationally in addressing how environmental and economic issues can be integrated at the global level.

- By launching a Canadian version of the *Environmental Business Journal* and by opening up new business opportunities in other countries, the department has made strides in improving the *Canadian Environmental Industry Strategy*.

The bullets above only highlight key results. The discussion that follows expands on the status of the action items and justifies whether or not the department is on track to meet the SD goals it set out in SDS I.

IC is meeting its trade policy related goal (action item 18) of continuing to participate on Canadian delegations "so that stakeholder interests are represented in a manner that balances economic and environmental objectives". The department has actively participated in World Trade Organization meetings and has attended United Nations meetings; its participation at the Organization for Economic Co-operation and Development has allowed it to help draft a chapter for a future OECD guidance manual on trade and extended producer responsibility.

The department is making progress on completing action item 19 (policy guidelines for rules frameworks). Ultimately, IC wants to continue to cooperate with other departments on the formulation of policy guidelines for the "purposes of negotiating international environmental agreements." Industry Canada has participated in the development of a mandate for and the negotiations of the Biosafety Protocol that will set rules on trade in genetically-modified products. The department has also participated in the development and completion of a Memorandum to Cabinet identifying an International Strategy on Persistent Organic Pollutants (POPs) and has participated in international negotiations.

Action item 20, *Canadian Environmental Industry Strategy* (CEIS), relates to the department's trade promotion and investment priority. The CEIS consists of 22 initiatives of which 10 have elements that support SD. Over the three year period of SDS I, Industry Canada plans to review the success of CEIS and to consider the development of a follow-up strategy. IC has also developed a draft Targeted Growth Strategy for the environment industry, launched Virtual Offices across Canada, facilitated alliances of environmental companies to pursue export markets, launched a Canadian version of the *Environmental Business Journal*, and opened up new business opportunities in other countries. These activities are helping IC meet and potentially exceed its goals of improving "access to domestic and global market opportunities" and of improving the "marketing of Canadian environmental companies". Industry Canada has also successfully negotiated bilateral cooperative agreements to deliver capacity-building and technology transfer activities.

3.4 Stewardship and Management

In SDS I, IC set out a stewardship and management objective to "continue to improve the capacity of Industry Canada to manage and deliver departmental polices, programs and operations which contribute to sustainable development". The department defined the following two priority areas that relate to this objective:

- **making better decisions**: make decisions based on a continually improving awareness and understanding of the economic, environmental, and social implications of existing and proposed activities;

- **greening operations**: ensure that day-to-day physical operations at Industry Canada have minimal impacts on the environment.

Seven action items fall under Industry Canada's Stewardship and Management objective. Six of these (action items 21-26) are related to the priority of making better decisions – only one (action item 27) is related to the greening operations priority.

The table below (Exhibit 8) summarizes and comments on IC's progress in completing these Stewardship and Management action items.

Exhibit 8: Mid-term Results: Stewardship and Management (to continue to improve the capacity of Industry Canada to manage and deliver departmental policies, programs and operations which contribute to sustainable development)

Action Item	Level of Completion	Comments
Priority Area: **Making Better Decisions**		
21. Improvements to project environmental assessments	• identified new environmental assessment co-ordinators and expanded network • defined roles and responsibilities of EA co-ordinators • trained staff appropriately	progress on track
22. Evaluation frameworks for new programs	• SD criteria integrated into evaluation frameworks • draft guidelines drawn up for integrating SD issues into IC Evaluation Frameworks	progress ongoing
23. Sustainable development policy research	• variety of studies completed or underway (e.g. 'Measuring SD', 'Productivity and SD', 'Economics and the Environment')	moved beyond scope of original action item
24. Sustainable development training	• training course material developed • course delivered in June 1999 and again in November 1999	delivered and ongoing
25. Environmental assessments of policies and programs	• developed guidelines and a questionnaire for undertaking Strategic Environmental Assessments (SEA) • applied SEA approach on a pilot project basis	completed
26. Internal communications	• variety of articles published on SD related issues	progress ongoing

Priority Area: **Greening Operations**		
27. Greening operations	• chief Environmental Steward appointed • conducted waste audits within CD Howe and 1239 Clyde buildings • training staff and improving awareness of SD issues • reviewed hazardous waste management practices • listing companies that offer green products	appears on track

As Exhibit 8 shows, IC has undertaken a broad range of activities in order to complete stewardship and management related action items. The department has fulfilled or exceeded requirements connected to action items 21, 22, 23 and 24, and has made progress towards completing action items 25, 26 and 27.

Key mid-term results include:

- IC is now applying SD evaluation frameworks to existing and new programs.
- Developed and twice delivered a three module SD training course.
- Produced and distributed a number of policy research studies on SD.
- Developed and pilot-tested an approach to conducting strategic environmental assessments.
- The department is moving forward on greening its operations, but it is not clear whether IC will meet the letter and spirit of federal environmental laws.

The bullets above only highlight key results. The discussion that follows expands on the status of the action items and justifies whether or not the department is on track to meet the SD goals it set out in SDS I.

Regarding action item 21, making improvements to project environmental assessments, by defining the roles and responsibilities of EA co-ordinators and by training these co-ordinators appropriately, IC is meeting the goals it set in SDS I. Likewise, IC is meeting its targets related to evaluation frameworks for new programs. In SDS I, IC set out to enhance the "integration of sustainable development criteria in relevant program evaluation frameworks". The department has exceeded this goal and is applying its SD evaluation frameworks to existing programs as well as to new programs. The department has also substantially completed its commitment to develop and deliver a SD training course (action item 24).

The department has completed action items 23, 25 and 26. A variety of internal SD articles have hopefully increased awareness of SD challenges among IC staff. The department has also developed and assessed, on a pilot-project basis, an approach for conducting improved environmental assessments of new IC policies and programs and has undertaken policy research and analysis that contributes to SD in a knowledge-based economy.

Finally, IC is making progress and appears on track towards meeting its greening of operations targets (action item 27). It is working to implement the *Greening Operations Action Plan* to ensure that departmental operations are conducted in a manner consistent with good environmental stewardship principles and practices. Relevant activities include: the appointment of a chief environmental steward; staff information sessions to raise awareness; the development of tolls that support SD initiative; compilation of a list of all companies that offer green products. IC has also prepared a Baseline Environmental Performance Indicator Development Report and has implemented recycling programs throughout the department.

While Industry Canada is certainly moving forward on greening its own operations, the department is finding it challenging to meet government requirements because many of the factors of influence are controlled by Public Works. More specifically, Industry Canada is establishing an appropriate Environmental Management System and is increasingly integrating environmental considerations into operational decisions. However, it is only beginning to measure the extent of the departmental use of raw materials, energy, water and other resources. At this stage, it is not clear whether Industry Canada will achieve the targets outlined in its Greening Operations Plan and the commitments made on this in SDS I.

4 Meeting the Objectives of SDS I

This chapter of the report begins by charting Industry Canada's journey towards and through the SDS process. The chapter continues by setting out factors that facilitated the development of SDS I. Finally, the chapter explores some of the lessons learned during the SDS process (i.e. factors that impeded SDS I).

4.1 Journey Towards Meeting SDS I Objectives

As Exhibit 1, Chapter 1 shows, Industry Canada developed four objectives to guide SDS I: marketplace climate, innovation, trade and investment, and stewardship and management. These objectives are helping Industry Canada ... *promote sustainable development in pursuing its overall mission for a growing, competitive, knowledge-based Canadian economy.* Nine priority areas and twenty-seven action items support these objectives. The department intended that these priority areas and action items would incrementally integrate SD into the department's internal and external operations.

The department recognizes that sustainable development does not happen overnight, and that SDS I is the first step in an evolving "journey". Consequently, SDS I built on existing departmental activities and focused on areas where the most immediate, amenable concrete action could be taken. It presented a foundation on which the department hopes to build an increasingly comprehensive sustainable development agenda. Indeed, Industry Canada has made much progress on its sustainable development journey. Exhibit 9 lists key milestones that have occurred since the federal government formally introduced legislation requiring departments to have sustainable development strategies.

As evidenced by the December 1999 report of the Commissioner of the Environment and Sustainable Development, *Moving up the Learning Curve*, it is expected that as departments become more familiar with the sustainable development agenda, their strategies will evolve and improve. Industry Canada has come a long way in moving up the learning curve over the past two years. Concrete steps that the department has undertaken to advance its sustainable development agenda include:

- Development of the first sustainable development strategy in 1997 that included:
  - A departmental profile describing the department's mandate and key activities, its strategic objectives and principal lines of business, and the legislative and policy context in which the department operates.
  - A description of the issues scan process comprised of an initial baseline study and an analysis of emerging sustainable development themes relevant to departmental activities.

- A description of the stakeholder consultations that were held to involve stakeholders throughout the stages of building the strategy. This consultation process with stakeholders was a key requirement of the *Guide to Green Government* and the process helped the department to better understand the needs and views of stakeholders while communicating its commitment to SD.

Exhibit 9: Moving Up the Learning Curve

Key Milestones Industry Canada Sustainable Development Strategy	
June 1995	Federal government releases *A Guide to Green Government*.
December 1995	Amendments to Auditor General Act make it a requirement for departments to prepare sustainable development strategies.
Early 1996	Industry Canada undertakes initial baseline study and analysis of sustainable development themes.
Jan/Feb 1997	Consultation sessions held with representatives from industry, consumer and environmental groups.
April 1997	Industry Canada develops first draft of sustainable development strategy and conducts select review.
September 1997	Second consultation sessions with representatives from industry, consumer and environmental groups.
December 1997	Industry Canada's SDS I tabled with Parliament.
Early 1998	Additional action item not originally included in SDS I is added to strategy.
May 1998	Commissioner of the Environment and Sustainable Development 1998 annual report assesses first round of strategies.
September 1998	Industry Canada develops a draft Evaluation Framework for SDS I.
October 1998	1998 Performance Report: Industry Canada presents first annual SDS progress report in DPR to Parliament (and posts on SD Web site).
November 1998	Industry Canada prepares semi-annual progress report for senior management and Deputy Minister.
April 1999	SDS targets presented in Report on Plans & Priorities
May 1999	Commissioner's 1999 annual report released.
October 1999	1999 Performance Report: Industry Canada presents second annual SDS progress report in DPR to Parliament (and posts on SD Web site).

November 1999	Industry Canada prepares semi-annual progress report for senior management and Deputy Minister.
December 1999	Commissioner releases "Moving Up the Learning Curve".
December 1999	Industry Canada undertakes internal and external issues scans to prepare for development of SDS II.
December 1999/ January 2000	Industry Canada undertakes mid-term evaluation of SDS I.
October 2000	Industry Canada's third annual progress report in DPR to parliament is expected.
December 2000	Second sustainable development strategy due to be tabled in the House of Commons.

  - 27 action items in SDS I to operationalize and promote progress on the nine priority areas identified for the four strategic objectives. The action plan also described partnerships for helping the department achieve its objectives and goals.

  - Addition of one further action item to the Strategy in 1998.

- Significant progress has been made on all of the action items to date. The department has completed all of the discrete action items it set out in SDS I, and good progress is being made on each of the remaining on-going action items.

- Undertaking of other sustainable development related activities beyond the scope of SDS I. For example, the department has invested time and support to the federal climate change priorities, and to programs such as CANARIE, Canadian Tourism Commission and Networks of Centres of Excellence.

- Creation of a draft evaluation framework that sets out the planned approach for periodic evaluation activities to assess the overall effectiveness of the SDS implementation

- Development of a detailed monitoring and reporting system whereby semi-annual progress reports are prepared on each of the defined action items, describing completed progress to date. These progress reports are presented to senior management and are integrated into the department's Departmental Performance Report.

- Creation of a dedicated "sustainable development unit" to advance the sustainable development agenda, coordinate the preparation of monitoring and reporting system products, promote awareness and work on preparing SDS II.

- Undertaking of an assessment of the first strategy, as evidenced by this mid-term analysis review. This mid-term evaluation describes what has been achieved, what lessons have been learned and what potential areas could be improved for the second strategy.

4.2 Factors Facilitating SDS I

This section of the chapter describes factors that facilitated the advancement and development of Industry Canada's first sustainable development strategy (Exhibit 10). These factors were identified in interviews with departmental and client representatives (see Appendix B).

Exhibit 10: Facilitating Factors

Facilitators
• Sustainable development "champions" within the department
• DG sustainable development committee and SD Network
• Sustainable development unit
• Interdepartmental discussions on development of SDS I
• Progress reporting
• Interdepartmental cooperation on implementation
• Partnerships with stakeholders
• Designation of responsibility

Sustainable development "champions" within department: There is significant expertise throughout the department including many strong, forward-thinking employees who are knowledgeable about sustainable development. These individuals were instrumental in bringing SDS I to fruition. In addition, many good discussion papers on various sustainable development topics were written during the SDS development phase. Most of the lead officers tasked with progressing on the action items from SDS I are committed to the successful progression of the strategy. They also play an important role in educating and promoting awareness of SD to the rest of the department. In addition, the department has formally designated two senior managers as SD "Champions", both at the Director General level. One champion to focus on external operations, the other on internal operations.

DG SD committee and SD Network: The DG's SD committee, a senior level body comprised of all DG's from the department was a very useful forum. This mechanism promoted senior management awareness and buy-in to the process of developing SDS I, and ultimately helped advance SDS I. For example, the committee was instrumental in securing the funding needed to get SD projects underway. Once SDS I was tabled in Parliament, the implementation of the strategy was integrated into horizontal senior management committees. An informal SD Network of officials and managers also contributed to effectively distributing related information and to seeking inputs for SDS I.

Sustainable Development Unit: The creation of this unit has helped promote awareness of SD. The unit is responsible for initiatives such as the internal course on SD and the SD Web site. While there is still a lot of work to be done to educate employees on SD, there has been a marked improvement in awareness. This unit is also responsible for the coordination of progress reporting and is playing a key role in working on SDS II.

Interdepartmental discussions on development of SDSI: Discussions between departments proved to be very valuable during the initial development stages of SDS I. This helped to clarify goals and share information on common concepts and facilitated the establishment of inter-departmental partnerships.

Progress reporting: Industry Canada has done a good job tracking the status of projects. The department has made a concerted effort to report regularly on the progress of action items identified in SDS I. Each action item is reviewed every six months in a status report that lead officers update. These individual reports are presented to the appropriate senior managers for sign off. They are then formally presented to senior management and the Deputy Minister and are integrated into the department's Performance Report.

Interdepartmental cooperation: Not only did departments share information, they also cooperated on a variety of fronts. For example, groups like the Interdepartmental network on SD, Interdepartmental Committee on Strategic Environmental Assessment, the Deputy Ministers Coordinating Committee on SD have all helped IC implement its SDS I.

Partnerships with Stakeholders: Consultations with clients and stakeholders were also valuable. Just as discussions with other departments were helpful, stakeholder consultations helped IC clarify its goals and enabled to department to ensure that stakeholder interests were factored into SD initiatives. IC recognizes that the implementation of SD initiatives requires teamwork and a coordinated and strategic approach to developing partnerships with stakeholders and clients in implementing specific areas of shared responsibility for SD.

Designation of Responsibility: In SDS I, Industry Canada clearly designated managers and officers responsible for each of action item (as well as details on planned deliverables and schedules). This clear designation of responsibility has helped to effectively implement the commitments of the strategy, particularly since lead officers are accountable for progress made of those action items attributed to them in SD status reports.

4.3 Lessons Learned from SDS I

The interview process revealed a variety of lessons learned from SDS I. Many of the lessons learned that are identified below, however, mirror factors that impeded the smooth implementation of SDS I. Yet, since the department is in a position to learn from such impediments, it is more constructive to present them under the guide of lessons learned, particularly if they are interpreted as such and are taken into consideration as the IC develops and implements SDS II.

Exhibit 11: Lessons Learned

- *Increase commitment and buy-in from senior management*
- *Focus on key strategic areas*
- *Capitalize on partnership opportunities*
- *Promote better awareness of SD*
- *Increased private industry focus*
- *Continued relevance of SD initiatives*

Increase commitment and buy-in from senior management: Senior management's commitment to SDS I was not always evident to staff and those trying to implement the strategy. As a result, there is a perception among many officials interviewed that the SD initiative is not a departmental priority. It is seen in terms of due diligence rather than as an opportunity to advance a sustainable development agenda. Sustainable development is often balanced against other senior management priorities.

For SDS II to have a greater impact than did SDS I, SDS II needs to be a priority across the department. In particular, if senior management appears more committed to the strategy it will be easier to sell it to the department at large. The SDS I process identified opportunities to increase senior management's commitment and buy-in to the SDS by involving the senior management team on sustainable development. A more co-ordinated effort to involve senior management could include:

- Promoting the ideas and examples of other departments who have been very successful with their SDS strategies and have had high managerial commitment (e.g., NRCan).
- Running a seminar on integrating SD in planning and reporting, similar to existing management seminars that are already provided within the department.
- Using management accountability accords.
- Having bonuses tied to achieving the goals of SDS.

Increased management buy-in could lead to SD being more effectively integrated into departmental business planning and might, potentially, make SD more of a priority within the department.

Further to increasing senior management's buy-in to SD, IC needs to communicate clearly the role of SD "champions" responsible for achieving SD goals. Many departmental officials perceive the communication of the SD champions' role as crucial for facilitating the development of SDS II and for promoting SD within the department. A clearly communicated champion from the senior management team, preferably the ADM level, would make it easier to "sell" the SD message to senior management and give credibility to the process.

Focus on key strategic areas: SDS I provided a substantive presentation of objectives, priorities and departmental initiatives. Yet, while the document is quite comprehensive and meets requirements of the *Guide to Green Government*, there was a perception by some within IC that SDS II needs a more strategic, far-reaching focus.

For the next strategy, it is important that besides defining a specific set of strategic goals and SD initiatives, the department:

- Continue to clearly assign responsibility for the achievement of these goals.
- Develop a performance measurement process – a plan that measures progress.

Furthermore, the department has only made limited progress in linking and integrating SD to its strategic objectives. SD is referenced in the department's key document — the *Report on Plans and Priorities* but only as an adjunct, stand-alone annex (as required by Treasury Board) rather than as an integral part of the departmental mandate. This made it difficult to integrate key SD action items into the department's mandate.

Although SD has been integrated into the overall departmental business plan, references are at a high, general level. Little, if any, reference to SD is made in lower-level business plans – the plans that are often more useful to line managers for day-to-day operational planning.

Capitalize on partnership opportunities: The power of partnerships, both internal and external, can be capitalized on to share ideas and resources more effectively. Many partnerships exist only because they have to. There are opportunities to improve existing partnerships and to create new ones. For example:

- Create internal partnerships with other branches/groups within the department (i.e. EAB/OCA). These internal partnerships can fill gaps in expertise and knowledge in various areas and create more effective delivery of SD in all branches of the department.
- Capitalize on other departments' work and ideas through interdepartmental working groups.

- Share in the knowledge and experiences of other departments seen as having "best practices" in particular fields. For example, the Policy Research Committee does good work on SD and research.

- Survey those industries that are advanced in the SD area (i.e. chemicals). Their knowledge and innovative solutions could be adapted to IC where appropriate.

- Promote SD more cost-effectively through partnerships with departments who share common clients with Industry Canada, such as NRCan, DFAIT and Environment Canada. Although they may take more time and energy, partnerships with other departments often offer a more cost-effective approach to promoting SD than individual attempts.

Promote better awareness of SD: There are opportunities to recognize that individual actions (internal and external) often have an SD component. There are many good SD initiatives throughout the department — for example, the strategy document itself, the SD Web site, and several SD related articles and papers — but often staff is unaware that these initiatives exist. An internal awareness strategy could be used to promote SD more aggressively. Awareness could perhaps be improved through such initiatives as:

- The internal SD course developed and pilot tested by the SD unit could be integrated into the Corporate Training Program.

- The department could build a SD component into staff job descriptions.

- There are many knowledgeable individuals in private industry who are very willing to speak on SD. More of them could be brought in to the department for internal seminars to promote awareness.

- An internal mail distribution list for those interested in SD that would inform and update staff on what is going on and what initiatives are taking place (e.g. SD Web site, a formal "SD Network").

Increased private industry focus of strategy: Many of the industry stakeholders interviewed do not feel that SDS I has had a significant impact. Few industrial clients have the document or refer to it in their day-to-day activities. Nonetheless, the strategy has allowed industry to interact with Industry Canada on a number of initiatives to help advance SD (e.g. eco-efficiency indicators, environmental business solutions). The initial SD challenge was to convince industry that SD was a win/win situation – this is happening. The task at hand is now to help them advance further.

Opportunities exist for IC to improve SDS II by giving the strategy even more of a private industry focus. These opportunities include:

- *Focus on how to encourage industry to adopt best practices.* Some industries are ahead of government and leading the way, while others lag behind. This is the area where Industry Canada is perceived to be able to make a significant impact.

- *Reach out to all industry sectors and mainstream companies.* Industry Canada could ask the following question of the private sector: "What does it take for a business to operate effectively in an SD environment?"

SDS II, however, could also benefit from a detailed assessment of industry or business attitudes towards sustainable development. This could be done with a good baseline survey of business and consumers. A broader survey than was done for SDS I (i.e. not just discussions with selected industry groups) would provide a more detailed understanding of business attitudes and their willingness to invest in particular projects. This would help to understand whether business and consumers would accept proposed SD initiatives. It would determine what business is willing to take and how far they can be encouraged to adopt SD practices.

Finally, in many cases, voluntary initiatives have proven to be much more successful within industry than imposed regulatory reform. If industry takes ownership over the integration of SD into their operations and practices through voluntary codes and standards, then progress will be made on moving ahead on SD in Canada. This is beginning to happen, and Industry Canada can work to ensure the momentum continues here. Essentially, industry needs to write sustainable development into its codes and conducts.

Continued relevance of each SD initiative: Each SD action item or initiative could be reviewed periodically to ascertain its continued relevance to advancing the department's sustainable development agenda. Factors that could be considered in this review include:

- *The relative impacts of these initiatives on sustainable development.* Industry Canada could consider how SD action items fit into the overall SDS framework. The department might develop a more comprehensive evaluation to address this question and to determine the full impact of its SD initiatives.

- *The contribution to the long-term vision of the department.* To ensure their continued and greater relevance, sustainable development initiatives should have a long-term orientation with an expected lasting impact. A clear sustainable development vision helps people to focus their ultimate goals.

- *The scope of the initiative in developing partnerships with external stakeholders and other federal government departments.* While IC's SD initiatives generally identify the partnering relationships required for the implementation of each action item, the department needs to assess the effectiveness of these partnerships. In particular, there is a need to continue to encourage partnerships with other government departments and with private sector organizations in the follow areas of SD concern: climate change; environmental assessments; responsible care initiatives; environment practices of companies (including quality assurance and adoption of ISO 14000); measuring impacts of SD on productivity and economic growth.

- *Adequate resources.* While adequate resources were made available to complete each SD action item in SDS I, more effort could be made to explicitly describe the resources necessary to complete each commitment in SDS II.

- *The extent of integration of SD initiatives into the department's overall mandate and strategic directions.* Industry Canada might revisit each of its sustainable development initiatives in order to assess how well these initiatives fit into the context of the department's mandate. The department might also assess the continuing relevance of initiatives in the context of the new *Issues Scan* for SDS II and subsequent consultations with stakeholders and departmental clients.

5 Monitoring and Reporting Results

Industry Canada, in accordance with Treasury Board regulations, has established a two-pronged system for monitoring and reporting on the status of the SD action items set out in SDS I. First, responsible managers and lead officers are required to submit bi-yearly status reports, to the Strategic Policy Branch, which reports the results to senior management and to the Deputy Minister. These reports include plans for the completion of SD activities (as well as plans beyond the commitments) within the three year time frame of the strategy. Second, Industry Canada includes a short progress report on the status of the department's SDS in its annual Departmental Performance Report that is tabled in Parliament. This progress report along with a more detailed reference document are also posted on the SD Web site.

This chapter of the mid-term evaluation report compares Industry Canada's monitoring and reporting systems with suggestions made by the Commissioner of the Environment and Sustainable Development (SD Com) on how a department should monitor and report on its SD strategy. It highlights opportunities for Industry Canada to amend current monitoring and reporting systems so that they are more closely aligned to the SD Commissioner's expectations. The chapter then outlines more general constraints that may be making the IC systems less effective and that may be hindering the department from meeting SD Commissioner expectations.

5.1 Ongoing Data Collection Requirements

In order to reliably implement its SD strategy, a department needs to collect data that measures the progress being made in carrying out SD initiatives. A good data collection system will determine whether or not a strategy is on track and whether or not it is making progress towards contributing to government-wide SD goals.

This section of our report highlights SD Commissioner suggestions as to how a department might approach and then monitor the implementation of an action item. It continues by describing the current IC system and by describing the key categories IC is using to monitor and describe the progress of its strategy. Finally, the section outlines opportunities for IC to amend its current data collection system to bring it more closely in line with SD Com requirements.

5.1.1 Data Collection Guidelines

The SD Commissioner does not explicitly set out guidelines on how a department should collect the data needed to monitor the progress of its SDS. Instead, the SD Commissioner compares the approaches that six departments are taking to implement environmental management systems. Nevertheless, within this discussion the SD Commissioner hints at what a department should include in its SD status report and how a department should structure its data monitoring system so that it effectively monitors the progress the department is making in implementing its SDS.

Articulation of objectives: In order to monitor the progress a department is making in implementing its SD action items and thus its SDS in general, it is important that the policies, programs and operations being used to identify and manage SD objectives are clearly communicated. Long and short term performance expectations should also be set out.

Laying the groundwork: Part of the process of monitoring the status of a department's SDS involves reviewing and assessing the SD components of existing policies and programs; opportunities may exist to further departmental SD objectives through existing activities. A department also needs to formalize partnerships necessary to carry out an action item, and should define responsibilities and allocate resources necessary to do so.

Strategy implementation: Before implementing a SD action item, a department needs to develop policies, processes and work instructions that establish how and when objectives and targets for SD will be achieved. In essence, the department must operationalize the SD initiatives found in its strategy. It must establish rules, responsibilities and accountability for contributing to the achievement of the strategy objectives at all levels in the organization so that it can prove that it has the capacity to track and report progress towards SDS objectives.

Checking, corrective action and management review: Internal audits or self assessments are an essential component of identifying gaps in the implementation process and for identifying opportunities for improvement. Essentially, internal audits are a way to ensure that the strategy is on track. Yet, for strategy action items to translate into reality, senior management should be closely involved in the monitoring of progress related to the implementation of SD action items. Senior management has a role to help identify weaknesses in existing practices and then to help identify solutions so that corrective action can take place before problems arise.

5.1.2 Industry Canada SDS Status Reports

As mentioned above, the formal tool Industry Canada is using to collect data on the status of the implementation of SD action items is the SDS status reporting system. Twice a year, senior managers are called upon to have their lead officers submit status reports to the Strategic Policy Branch which prepares a coordinated progress report to senior management committees and the Deputy Minister. These status reports include plans for the completion of SD activities within the three-year time frame of the strategy.

The most recent status report reviewed for the mid-term evaluation (November 1999) includes updates on the action items for the period between April and September, 1999. Of these 20 items had additional accomplishments beyond the previous status report. It also includes a report on the one action item added since the publication of SDS I. Each status report is structured in a similar way. A brief description of the evaluation categories follows.

1. **Description**: The status report begins with a description of the action item. The description is taken directly from SDS I, and in a few cases, additional information has been added to the description.

2. **Targets:** Action item targets are taken verbatim from targets outlined in the 1999-2000 RPP. If no target was laid-out in the RPP, no target is set for the initiative in the status report. The targets laid out included in the status report are measurable, time-bound and tend to be output-oriented (although some aim to be outcome-oriented).

   These targets are meant to be a performance measurement tool, but only when IC is able to introduce targets that attempt to measure the impacts of the implementation of an action item, will it be able to gauge the success of a SD strategy. It is recognized that there are costs, methodological and systemic challenges to achieving this.

3. **Expected near-term results:** The expected near-term results included in the status reports are the same as those listed in SDS I. In a few instances additional expected near-term results are included, but in general expected results are closely aligned to SDS I.

4. **Implementation Plan – deliverables/outputs**: The implementation planning sections are the most detailed and informative sections included in the status report. The sections list completed activities. They also list activities that are underway and planned for 1999/2000. The amount of information included varies from action item to action item. For example, there is a great deal of information included under the Reasoned Advocacy to Shape Environmental Policy action item; relatively little is included under Voluntary Standards Systems. This is not necessarily a reflection of the department's commitment to the action items. Furthermore, some action items have more components and details than others. Further, the less detailed status reports may cross-reference other documents for details. This section of the status report also provides the opportunity for officials to outline plans beyond the commitments in the strategy.

5. **Performance measures/indicators:** In general, performance measures/ indicators are still being developed for the initiatives. A few initiatives have incorporated performance measures (e.g. Web site hits, recycling audits), but more measures need to be identified to more effectively assess the impact of the SD initiatives. Guidance in this matter on SD evaluation and performance indicators from the Commissioner's office and/or Treasury Board Secretariat could contribute to identifying the most effective measures. As mentioned above, performance measures need to be more closely linked to targets, in order to be effective in assessing outcomes. Prohibitive costs and methodological limitations are recognized as a constraint here.

6. **Consultation/cooperation/partnerships:** A variety of consultations/ cooperation/partnerships are required to implement the SD action items. Partnerships with other government departments or with industry are the most common. The status report includes a description of the scope of partnerships formed in order to carry out an action item.

7. **Barriers to implementation**: This category identifies the barriers to the implementation of further action beyond commitments, if any. One barrier to the further implementation beyond commitments of an action item is insufficient resources. Other barriers include lack of coordinated partnerships, heavy reliance on partnerships and low priority of the initiative. Some of the action items foresaw no barrier to their implementation.

8. **Resources:** There is no consistency as to how resources are described in the status reports. Some action items simply state that specific funds are allocated to implementing the initiative, others specify how much is allocated towards the action item. Some action items only provide an explanation of how funds are found (i.e. on a project specific basis), while others lay out budget specifics.

   The lack of consistency in this section makes it difficult to assess budgetary requirements across the department. Since resources are continually cited as a barrier to further implementation, it might be helpful to lay-out clearer guidelines as to what information should be included under resources.

9. **Contacts:** Lists the Lead Officer and Responsibility Centre Manager currently in-charge of the initiative.

It is worth noting that IC is in the process of attempting to develop an interactive monitoring system that could improve the efficiency and effectiveness of reporting procedures. The system, which will most likely be an interactive web-based tracking and reporting tool, should minimize reporting fatigue on the part of those implementing the action commitments, while expediting the reporting of progress to senior management, staff and stakeholders. The implementation of such a system will be an important step towards creating a data collection system that is more line with SD Com guidelines.

5.1.3 Opportunities for Improvement

In general, the evaluation categories IC is using in its status reports to monitor the progress of SDS I are sufficient. Nevertheless, opportunities exist to improve both the content of information and level of detail included in the categories. Some of these opportunities are highlighted below.

While IC's SDS status reports on SD action items do communicate policy and performance expectations, the links between the large number of activities and the stated SD objectives for the department are often not so clear to provide sufficient insight about whether the initiatives have had an impact on achieving the objectives. However, it is also true that it might be too soon to evaluate impacts, given the short span of the program to date. As a result, beyond tallying the activities completed, it is difficult to conclude whether the department has made progress towards SD impacts in the first two years of its existence.

IC's SDS status reports document progress made towards completing a specific SD initiative. While the current method of listing completed and planned activities does assess whether or not the initiative is being carried out according to plan, this could be accomplished with more clarity and also with an explanation of how successfully it is addressing wider SD issues.

One of the largest areas for potential improvement is the performance measurement aspect of monitoring progress. Without adequate performance measurement information, it is difficult to assess progress relative to the specific actions set out in the strategy. IC could aim to present a clearer set of targets and associated indicators of performance for longer term impacts.

5.2 Reporting Requirements

In accordance with Treasury Board requirements, a federal department's annual Performance Report now includes a short progress section on the status of the department's sustainable development strategy. This SD section of the Performance Report is the only formal reporting method in place for departments to report directly to Parliament on the implementation status of their SD action items. Ultimately, these SD sections are a means for Parliament (the SD Commissioner) to evaluate whether or not a department is doing what it set out to do in its SDS.

This section of our report follows the same format as does the section above. It begins by highlighting reporting guidelines suggested by the SD Commissioner. It then evaluates IC's SD section of its Annual Departmental Performance with attention to the guidelines so that it can outline opportunities for IC to amend its current reporting system to align it more closely with SD Commissioner expectations.

5.2.1 Reporting Guidelines

According to the SD Commissioner, the SDS section of a department's annual performance report should report on progress made towards fulfilling commitments made in the SDS. It should also explain any corrective action being taken in order to effectively fulfill promises. In essence, the SDS subsection should determine whether or not the department is on track, and if it is not, what it intends to do to get on track. The SDS should also include updates on the further development of action items.

The SD Commissioner suggests that Performance reports should include[1]:

- Key goals/objectives/long term targets.
- Performance indicators or performance measurement strategy.
- Targets for the reporting period.
- Progress to date and any corrective action.

---

[1] *Report of the Commissioner of the Environment and Sustainable Development, 1999, 1-11*

Departmental performance reports should also note which commitments require inter-departmental partnerships. It is important that interdepartmental discussions are held in order to ensure consistency. The performance report should also highlight specific initiatives that require a substantial investment of resources and should illustrate how it intends to find the necessary resources.

Finally, the SD Commissioner notes that because performance reports only include highlights, references and Internet addresses to additional sources of information (e.g. reports and other publications) should be included where appropriate.

5.2.2 Industry Canada's Performance Report

Industry Canada's performance report lists individual action items in the context of the strategic objectives and priorities as they were outlined in SDS1. The report details each initiative according to the following categories:

- Description: description of the SD action item.
- Deliverable(s): expected results from completed action item.
- Timing: time frame needed to deliver results.
- Accomplishments: what the department has accomplished in the past year related to the action item.
- Partnerships: lists who else is involved (other government departments, industry, etc.).
- Responsibility Center: what branch is responsible for carrying out the initiative.

The information included in the departmental performance reports is available internally in a Sustainable Development Strategy Action Items list and is also posted on the department's SD Web site. This list tracks progress made on individual action items during the lifetime of the SD strategy. The list has been updated to include accomplishments for the 1999/00 year, and contains identical categories to those found in the performance reports. It includes information on all 27 action items.

5.2.3 Opportunities for Improvement

IC's SD performance section sets out the department's short term accomplishments. There is an opportunity to further clarify the categories in the report that are listed above. For example, a clear statement of type and scope of information to be included under each category will contribute to a more consistent reporting approach throughout the department.

The SD performance section of the report establishes deliverables for the lifetime of the strategy and notes recent accomplishments. The performance report includes the department's overall goal, strategic objectives and priorities. Nonetheless, it is difficult to assess the potential measurable impact an SD action item might have on the goal, objectives and priorities. Likewise, few benchmarks or performance measurement indicators are included. The challenge of establishing these type of benchmarks and performance indicators for the SD area is not unique to Industry Canada. There is an opportunity here for inter-departmental action on this challenge, with the guidance of the SD Commissioner, and perhaps Treasury Board Secretariat.

In many instances, IC has moved beyond the scope of the SD action item laid out in SDS I and the department has added one new action item (see earlier sections of this report) and many incremental additions to the existing commitments. The performance reports provide the opportunities to update the action items and add new accomplished or planned activities beyond the original commitments.

IC's SD performance report does not mention resources. A lack of resources was consistently mentioned as a constraint to the further implementation of the strategy beyond commitments, and the SD performance report presents another opportunity to address this resource issue (in addition to senior management briefings). Until ways are developed to disaggregate resources from SD activities that are often highly integrated and partnered, it is recognized that this element could remain undescribed in the performance reports.

The SD Commissioner emphasizes the importance of working in partnership to further SD objectives. The department is only tackling 3 of its 27 action items in isolation (study on marketplace framework laws, SD Web site on Strategis, internal communications). The performance report, however, only lists the groups involved in partnerships. It does not establish the nature of the partnerships (e.g. consultative, financial), nor does it state the role of partners in preparing the report. The performance report presents an opportunity to describe the nature of the partnership more clearly.

5.3 Constraints

In the 'opportunities for improvement' sections above, an effort is made to limit opportunities to either data collection or reporting. This section of the report, however, outlines more general constraints that may be making the IC systems less effective and that may be hindering the department from meeting SD Commissioner data collection and reporting expectations.

5.3.1 Long Term Goals

Industry Canada's SD initiatives address the long-term SD goals that were set out in the SDS I document. However, it is difficult to track the progress of these initiatives against the long-term goals. Concurrent with setting long-term goals, IC could develop a reporting system that will monitor accomplishments against these long-term goals. Any such monitoring/reporting system should assess the linkages between SD initiatives and the goals. It is likely that many of the initiatives work towards similar long-term goals. Long-term planning might provide an opportunity for more fluidity between initiatives and might tie the strategy together.

5.3.2 Internal and External Reporting

In order to monitor the progress of its SDS more accurately, IC might consider broadening the scope of its monitoring methods. At present, IC is making use of the SDS status report, budgets, the business planning process, the Report on Plans and Priorities, the Departmental Performance Report and senior management committees. While these vehicles are a useful way to monitor progress, it does not necessarily capture the breadth of the department's capacity to carry out a SD action item – particularly in terms of external partnerships.

The department might consider using fora with external stakeholders be they from industry, other departments or other governments to communicate SD progress on SDS II. Such an approach could create an opportunity to extend the involvement of stakeholders in SDS implementation, and would allow external stakeholders to provide input on their part in the implementation of action items. While Industry Canada is already doing this (e.g. Interdepartmental SD Network) there could be an effort to capitalize upon other opportunities.

6 Performance Measurement

This chapter of the report considers performance measurement in the context of Industry Canada's first sustainable development strategy. The chapter begins by outlining the nature of the targets that IC is using to measure the success of SDS I. It then highlights departmental attitudes towards targets and the department's understanding of performance measurement requirements. Finally, the chapter outlines opportunities based on lessons learned from SDS I, for the department to build up its capacity to measure long-term SD performance.

6.1 Establishing Targets and Measuring Performance

Both the 1998 and 1999 Reports of the Commissioner of the Environment and Sustainable Development state the need for a department to establish clear targets as a way to improve its capacity to measure performance. More than simply establish a sense of the department's general approach to SD, the SD Commissioner's Reports explain that SD strategies need benchmarks that provide clear and detailed performance requirements for internal management and that define performance in terms that can be objectively audited or assessed by third parties.[1]

At the corporate level, performance measurement is about organizational commitment to strategic objectives and change. Results of performance measurement are intended to feed into the strategic process and to improve the program for future implementations of SD initiatives.

In SDS I, Industry Canada set out an approach to measuring performance that stresses the department's commitment to results. Accordingly, the department outlined its 27 action items as expected near-term results. IC then elaborated upon targets related to each action item in subsequent *Report[s] on Plans and Priorities*. Most of the targets that Industry Canada is using to assess SDS I focus on the identification of activities or processes to be carried out during the lifetime of the strategy (e.g. analysis, awareness or investment). In other words, these targets focus on the implementation and progress of an action item (short term) rather than on the success or impacts of SD oriented activities (long term).

Targets, however, are only one facet of the department's performance measurement system. In a draft SD *Evaluation Framework*, the department set out a series of indicators and an assessment method for the SD framework. The indicators include activities that could help monitor the completion of an action item and the assessment method describes a process that could be used to track the progress and impacts of the implementation of an action item.

---

[1] *Report of the Commissioner of the Environment and Sustainable Development*, 1998 and 1999.

The impacts and assessment method laid out in the draft SD *Evaluation Framework* are generally more geared to measuring impacts than targets, making them more effective performance measurement instruments. Accordingly, as Exhibit 12 shows, since the launch of SDS I the department has developed or is developing and considering a select number of SD-related performance measurement tools or indicators.

Exhibit 12: Industry Canada SD Performance Measurement Tools

IC SD Action Items	Related Performance Measurement Tool (In use, under development or under consideration)
Internal Communications	· recycling audits · web-site hits on newsletter articles on SD, Greening IC and Climate Change
Voluntary Standards System	· tally number of firms registered to ISO 14000
Canadian Environmental Solutions	· Web site hits · voluntary feedback
Cross-Sectoral Diffusion of Technologies	· Web site hits · stakeholder feedback
Reasoned Advocacy to Shape Environmental Policy	· tally number of informal/formal networks in which employee participates · tally number of reports, presentations to and meetings with industry
Sector Competitiveness Frameworks	· tally number of SCFs that include SD considerations
Voluntary Standards System	· evaluation framework document for all projects completed
Voluntary approaches to Environmental Management	· system to assess and promote voluntary approaches to environmental management
Study on Marketplace Framework Laws and SD	· applicability of SD framework to other Acts
Cross-sectoral Diffusion of Technologies	· follow-up focus group

As Exhibit 12 shows, the department has only begun to use SD indicators in the SD performance measurement process. Furthermore, because this report is a mid-term evaluation, it is likely that the department will make use of a greater number of indicators before the expiration of the strategy in December 2000.

The Exhibit, however, is somewhat misleading, for while it accurately reflects performance measures, it does not reflect the department's capacity to fully track its performance, which is an important component of any performance measurement system. As chapter 3 of this report shows, Industry Canada is generally on track to complete the SD activities set out in SDS I. The department's monitoring and reporting system captures this progress in terms of outputs and activities, but it is less successful in making the link between meeting targets and using other indicators to measure longer term performance goals. As a result, there is a perception within the department that IC could be more effective in measuring its SD related performance.

6.2 Measuring the Results of SDS I

Besides the challenge of linking targets and indicators, many of our interviewees raised the additional challenge of designing effective SD related performance measures. A variety of factors make it difficult for IC to design effective measures. It seems that:

- Because so many IC activities are in partnership with other organizations in the private and public sectors, it is not always feasible to establish performance measures that the department will be able to gather or control.

- While certain action items, like the implementation of ISO 14000, lend themselves to targets (e.g., how many companies subscribed to this standards series), it is very difficult to realistically set and meet certain environment-related targets (e.g., reduce greenhouse gas emissions by X percent by year Y) as well as to develop clear links with causality and attribution to Industry Canada initiatives.

- Short-term targets are not always an effective way to measure performance, particularly as it relates to a long-term objective like contributing to SD.

Nevertheless, there is also an understanding within the department of the importance of continuing to build targets and performance measurement tools into the SD process. Suggestions to improve departmental performance measurement tools include:

- **Involving external stakeholders in the process of assessing performance:** Many of the SD action items set out in SDS I are voluntary initiatives – their success ultimately depends on the participation and buy in of stakeholders. While IC can measure the success of an initiative's implementation, it is difficult for the department to follow up on longer-term impacts. As a result, the department might consider involving external stakeholders, particularly industry, in the process of assessing performance (e.g. external issue scans, surveys, consultations).

- **Greater inter-governmental cooperation:** It might be helpful for depart- ments, not just Industry Canada, to work with the Office of the Auditor General (OAG) and the Treasury Board Secretariat (TBS) to develop performance measurement criteria for SD initiatives. Ultimately, the OAG and the TBS are interested in a department's capacity to measure performance. Perhaps they could be consulted and drawn into the design stage of performance measurement for SD.

- **Long-term tools:** While targets are generally an effective means of tracking short-term performance, the department might consider developing a greater number of performance measures that have a long-term focus. If IC initiates an SD action item, without related, longer-term performance measures in place, it may be difficult later on for the department to point to a specific initiative as having made a real contribution to addressing a particular SD objective.

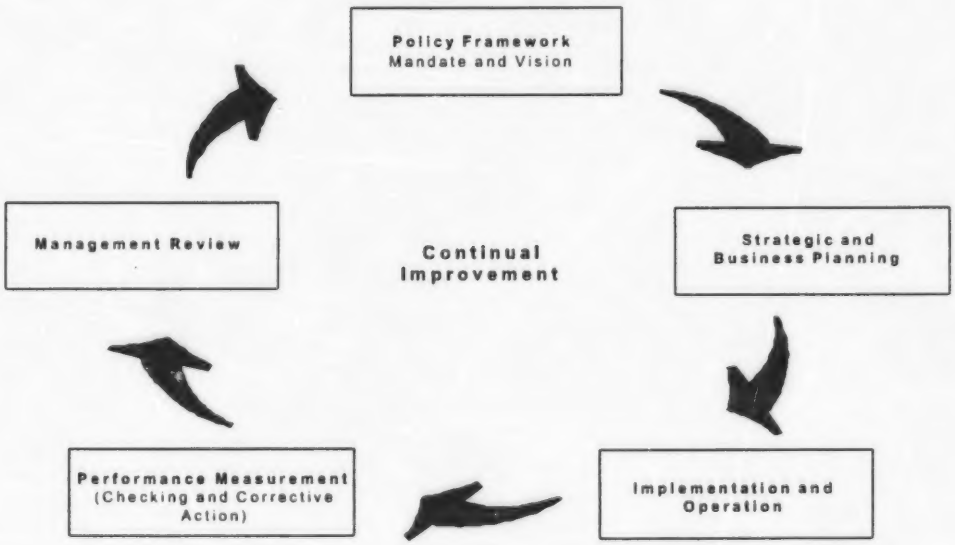
6.3 Opportunities for Improvement

The above-discussion illustrates that while opportunities exist for Industry Canada to improve its capacity to measure SD performance, the department nevertheless has the foundation of an SD performance measurement system. Furthermore, it is important to note that SDS I was the department's first attempt at a sustainable development strategy. It is a reasonable expectation that subsequent strategies will build on and evolve from each other.

Ultimately, however, there are two SD performance measurement related challenges facing Industry Canada. The first concerns the department's ability to communicate its capacity to measure SD performance and to make appropriate linkages between targets and other indicators. The second issue centres on the department's ability to design effective long-term SD performance measurement tools.

Both challenges reflect the department's approach to managing the SDS process. Exhibit 13 illustrates the steps in a well-designed management cycle, and helps highlight opportunities for Industry Canada to improve its performance measurement system.[1]

Exhibit 13: Management Cycle



[1] Based on diagram in *Report of the Commissioner of the Environment and Sustainable Development*, 1999, p. 1-13.

The Exhibit above outlines the steps involved in an effective management cycle. At the top of the cycle is a policy, which in this case relates to SDS I. This policy feeds into the planning phase, which feeds into the implementation and operation phase. As other chapters of this report show, Industry Canada effectively planned how to implement SD initiatives and implemented these initiatives successfully. Industry Canada has also introduced a monitoring and reporting system to measure performance. This system, however, needs to be expanded to measure performance in terms of ultimate outcomes and initiatives. The external issues scan and the SDS II consultation process will help address this challenge. Finally, with respect to the management review stage, this mid-term evaluation is helping to address these needs, needs that will be further supplemented through management vehicles like the RPP exercise.

Despite the fact that IC is building SD indicators into its performance measurement system, the links between the implementation and operation of an initiative and relevant checking and corrective measures are not as strong as they might be. The department's increasing capacity to measure performance could be more effectively communicated. While links have been made between the targets associated with implementation and performance indicators, opportunities exist to strengthen these links and to communicate them both internally and externally.

As Exhibit 13 shows that just as *implementation and operation* should be clearly linked to *checking and corrective actions*, so too should *checking and corrective action* be clearly linked to *management review*. It is at this stage of the management cycle where long-term related performance within IC could be given more attention. Without long-term performance measurement tools, the action items included in the strategy can be considered finished after the implementation and operation phases. The initiatives need not necessarily carry over to the development phase of the next strategy.

The action items set out in SDS I have in general made a contribution to furthering the wider goal of sustainable development. Admittedly, some of the action items featured in the strategy are ongoing initiatives and could likely feature in SDS II. Yet, rather than see SDS II as a new strategy, it might be helpful for the department to see it as a continuation of SDS I. In particular, the discrete initiatives completed during the lifetime of SDS I should not be forgotten and should be built on, and their impacts measured, over the long term.

What then are the specific opportunities that exist for IC to build on its capacity to measure performance as it relates to SD. In particular, IC might:

- make sure short-term targets are articulated clearly;
- compile performance information on an ongoing basis;
- continue to develop and link SD performance indicators; and
- develop long-term performance measurement tools that measure ultimate impacts and that are related to departmental SD objectives.

Make sure short-term targets are articulated clearly: IC's approach of setting out targets that relate to the short-term implementation of an action item is generally an effective way to track results and to ensure that action items are indeed implemented. These targets should clearly state meaningful and manageable expectations.

Compile performance information on an ongoing basis: The department might also consider compiling performance information for each SD action item on an ongoing basis. By building performance measurement into the scope of an action item from its inception, it might be easier for the department to monitor the short- and long-term impact of an action item. In this respect, more guidance from the office of the Commissioner of the Environment and Sustainable Development and from Treasury Board Secretariat, on SD-related performance indicators, would be useful.

Continue to develop and link SD performance indicators: IC has begun to develop effective SD performance indicators. It is important that the department continues to develop such indicators and that the department continues to make linkages between the targets associated with action items and performance measurement tools. It is also important that the department communicates these linkages effectively so that internal officials and external stakeholders are aware of the department's performance measurement system, and confident that the tools in place are measuring results and impacts.

Develop long-term performance measurement indicators that measure impacts and that are related to departmental SD objectives: As the discussion above shows, for IC's future SD strategies to have a maximum impact, it would be helpful for the department to develop long-term performance measurement that measure impacts. By giving subsequent strategies a long term measurable focus, the strategies can become more "living" documents that set out more long-term agendas that can be evaluated against relevant program impacts.

Appendix A

References

1. *A Guide to Green Government,* 1995.

2. Extract from the *1999 Speech from the Throne: The Quality of our Environment.*

3. Industry Canada: *Sustainable Development Strategy 1997.*

4. Industry Canada: *Making a Difference—Our Priorities for 1999-2000.*

5. Industry Canada: *1999-2000 Estimates—Report on Plans and Priorities.*

6. Industry Canada Sustainable Development Strategy: *Action Items List,* September 30, 1999.

7. Department of National Defence: *Environmentally Sustainable Defence Activities—A Sustainable Development Strategy for National Defence,* December 1997.

8. *Report of the Commissioner of the Environment and Sustainable Development to the House of Commons,* 1999.

9. *Moving Up the Learning Curve: The Second Generation of Sustainable Development Strategies.* Report from Brian Emmett, Commissioner of the Environment and Sustainable Development, December 1999.

10. Industry Canada *Draft Sustainable Development Strategy Evaluation Framework,* September 11, 1998.

11. Industry Canada: *SD Strategy Action Items by Responsibility Centre (Status Reports),* November 1999.

12. *Progress on Implementation of Action Items in Industry Canada's SD Strategy I* March 31, 1999 and March 31, 1998.

13. *A framework for identifying the linkages between Marketplace Framework Legislation and SD,* March 31, 1998

Appendix B

List of Persons Interviewed

Industry Canada

Brian Anderson, Director, Industry, Industry Canada.

John Arseneau, Senior Director and Associate Manager, Environmental Affairs Branch.

Lucien Bradet, Director General and Manager, Environmental Affairs Branch on Information Products, Environmental Technology and Trade.

Serge Croteau, Director General, Programs Services, Environmental Assessment and Industry Canada as an RA.

John Dauvergne, Team Leader, Sustainable Development, Environmental Affairs Branch - Sustainable Development and Climate Change Policy.

Philip Fleming, Team Coordinator, Climate Change Team, Environmental Affairs Branch - Sustainable Development and Climate Change Policy.

Lee Gill, Director, Corporate Law Policy, Industry and Science Policy.

Jaak Laan, Senior Communications Advisor, Advisory Services.

Wai Fai Lee, Team Leader, Information Products, Environmental Affairs Branch.

Robert Main, Director, Regulatory Affairs and Standards Policy.

Richard Pageau, Director General, Trades and Operations Branch, Strategic Planning and Corporate Services.

Paul Pierlot, Senior Advisor, Internet Content Policy, Telecommunications Policy Branch.

Robert Renaud, Manager, Program Integrity and Secretariat, Environmental Assessment and Industry Canada as an RA

Victoria Rowbotham, Director, Consumer Research and Analysis, Office of Consumer Affairs.

Larry Shaw, A/Director General, Industry and Science Policy.

Sheila Smail, Commerce Officer, Software Services, Information and Communications Technologies Branch.

Don Stewart, Officer, Environmental Affairs Branch - Sustainable Development and Climate Change Policy.

Anne Thompson, Regional Manager, Environmental Affairs Branch.

Val Traversy, Director General and Manager, Manufacturing and Processing Technologies.

Kernaghan Webb, Senior Legal Policy Advisor, Consumer Research and Analysis.

External

Jean Bélanger, former President of the Canadian Chemical Producers' Association.

John Dillon, Vice President, Environment and Legal Counsel, Business Council on National Issues.

Claude-André Lachance, Dow Chemical Canada Inc.

Ed Mallett, Ontario Center for Environmental Technology Advancement.

Ken Ogilvie, Pollution Probe.

Appendix C

Interview Guide

Introduction

The Auditor General Act requires that each federal department develop and table before Parliament "sustainable development strategies" (SDSs) every three years. The first strategies were tabled in December 1997. Revised strategies must be tabled by December 2000.

As part of the work it is doing to revise its SDS, Industry Canada is conducting a "mid-term evaluation" which is aimed at providing the department with information on results and lessons learned from the first Sustainable Development Strategy (SDS I), in particular the factors that facilitated and/or impeded the advancement of sustainable development by the department.

Industry Canada has commissioned KPMG to undertake a series of interviews with key persons involved in the department's sustainable development initiatives. The following interview questions are intended to help us identify the results achieved by SDS I, and to assess the continued relevance of these priorities. The feedback we get from the interviews will be used to develop a mid-term evaluation report on SDS I. **Your responses will also be helpful in planning future programs/strategies for sustainable development initiatives of Industry Canada. However, your participation is voluntary. The interview will take approximately one hour to complete. All information you provide will only be reported in aggregate form and will not be associated with your name in our reports.**

Industry Canada's sustainable development goals and objectives

In its first Sustainable Development Strategy, Industry Canada emphasized its "commitment to promoting sustainable development in pursuing its overall mission for a growing, competitive, knowledge-based Canadian economy."

There were four overall strategic objectives of SDS I:

- *Marketplace climate:* to foster a marketplace climate in Canada that promotes sustainable development.
- *Innovation:* to enhance the ability of Canadian firms to develop and use innovative technologies and tools which contribute to sustainable development.
- *Trade and investment:* to encourage trade and investment flows which contribute to sustainable development in Canada and abroad.
- *Stewardship:* to continue to improve the capacity of Industry Canada to manage and deliver departmental policies, programs and operations which contribute to sustainable development.

This Strategy, the first attempt to integrate SD into the department's policy and program activity, is intended to "create a solid platform on which to build an increasingly comprehensive departmental sustainable development agenda and incorporate practical, incremental steps to achieve it."

Within the four strategic objective areas, the department established 9 priorities and identified 27 discrete initiatives to incrementally integrate SD into department activities. The following table provides an outline of the 9 priority areas.

Objectives	Priority Areas
To foster a marketplace climate in Canada that promotes sustainable development.	➢ *Marketplace rules and services*: assess the links between the marketplace ground rules and SD ➢ *Reasoned advocacy to shape SD policy*: bring economic, competitiveness, trade and consumer expertise and concerns to policy development which supports SD ➢ *Consumer choice and the marketplace*: draw consumers more effectively into the promotion of SD by raising awareness and providing information
To enhance the ability of Canadian firms to develop and use innovative technologies and tools which contribute to sustainable development.	➢ *Innovative tools and practices*: work in partnership with industry to develop innovative tools and practices which improve business and environmental performance ➢ *Technology development and diffusion*: encourage the development and diffusion of clean-production and enabling technologies that produce long-term economic and environmental benefits
To encourage trade and investment flows which contribute to sustainable development in Canada and abroad.	➢ *Trade policy*: promote the establishment of international rules which further the objectives of SD ➢ *Trade promotion and investment*: encourage investment in and export of Canadian knowledge, products, practices and technologies which further the objectives of SD

Objectives	Priority Areas
To continue to improve the capacity of Industry Canada to manage and deliver departmental policies, programs and operations which contribute to sustainable development.	➢ *Making better decisions*: make decisions based on a continually improving awareness and understanding of the economic, environmental, and social implications of existing and proposed activities ➢ *Greening operations*: ensure that day-to-day physical operations at Industry Canada have minimal impacts on the environment

Question topics

- **Relevance of SD to Industry Canada Policies and Programs**
- **Meeting the Objectives of SDS I**
- **Impacts of the SD Initiatives Under Review**
- **Management of SDS**
- **Performance Measurement**

Your responses will also be helpful in planning future programs/strategies for sustainable development initiatives of Industry Canada. However, your participation is voluntary. The interview will take approximately one hour to complete. All information you provide will only be reported in aggregate form and will not be associated with.